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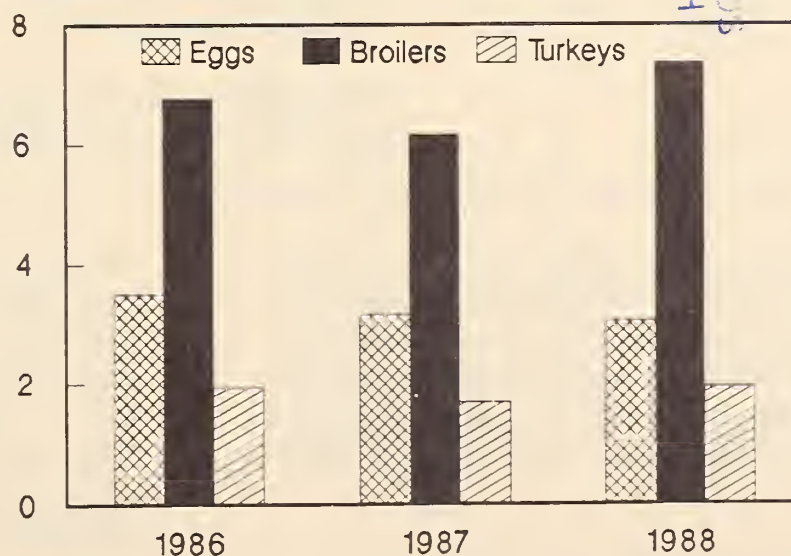
LPS-35
May 1989

Livestock and Poultry

Situation and Outlook Report

Value of Production

\$ U.S. billion



1988 preliminary.

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The present forecasts will be updated, if needed, in the *World Agricultural Supply and Demand Estimates* scheduled for release on June 12 and July 12, 1989.

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Summary

Total production of red meat and poultry for 1989 may rise 1 percent above the record level of 1988. Total poultry meat production will likely increase 4 percent, while red meat supplies are expected to be 2 percent below last year. Positive net returns are projected for broiler, turkey, and egg producers in 1989. Pork producers' returns are anticipated to be below breakeven for the year. Returns for cow-calf producers should remain above cash costs.

The total value of production of broilers, turkeys, chickens, and eggs reached a record level for 1988. Annual production exceeded \$12.5 billion, which was 12 percent greater than 1987 and 1.4 percent larger than the previous record, set in 1986. Broilers, eggs, and turkeys contributed approximately 59, 24, and 16 percent, respectively, to total poultry value.

Broiler production in 1989 is projected to exceed that of 1988 by about 5 percent. Wholesale prices have risen sharply this spring despite larger supplies, and should remain above last year's level this summer. Support for prices is coming from strong demand, particularly for further processed items.

Turkey production during first-quarter 1989 dropped about 4 percent compared with a year earlier. Total production for the year is estimated to be 2 percent above 1988 levels. Wholesale turkey hen prices in the Eastern region averaged 62 cents per pound in the first quarter, up sharply from last

year. Prices are expected to increase during the remainder of the year, and could average 69-72 cents per pound for the year.

Total egg production is expected to decline about 3 percent in 1989, reflecting producer adjustments to the negative returns of 1987 and 1988. First-quarter production declined 6 percent compared with a year ago. Wholesale New York egg prices averaged 79 cents per dozen for the first quarter of 1989, compared with 55 cents in 1988.

Commercial pork production during 1989 is expected to be about the same as a year earlier. Production will likely drop below 1988 levels in the second half of 1989, offsetting the rise in the first half. Barrow and gilt prices may average lower than 1988's \$43 per cwt, and retail pork prices may be slightly lower.

Beef production in the second quarter of 1989 is projected to rise nearly 9 percent above the low first quarter average, and 5 percent above a year earlier. Low forage supplies forced early movement of cattle off of pasture, resulting in record numbers of heifers on feed, and increasing early spring cow slaughter. Currently, second-half beef production is expected to decline 3 percent from a year earlier. If forage conditions do not improve, beef supplies will be larger. Choice steer prices at Omaha may average about \$3.00 per cwt above 1988's \$69.54.

Table 1--Livestock, poultry, and egg production and prices (All percent changes shown are from a year earlier.)

Item	1987	1988				1989 1/					
	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
Million pounds											
Production:											
Beef	23,405	5,700	5,784	6,185	5,755	23,424	5,529	6,050	5,975	5,550	23,104
% change	-3	-1	1	2	-2	0	-3	5	-3	-4	-1
Pork	14,312	3,790	3,727	3,775	4,331	15,623	3,887	3,775	3,750	4,175	15,587
% change	2	7	12	11	7	9	3	1	-1	-4	0
Lamb & mutton	309	85	80	80	84	329	87	80	80	83	330
% change	-7	12	7	4	4	6	2	0	0	-1	0
Veal	416	97	92	99	99	387	91	90	100	100	381
% change	-18	-13	-9	0	-5	-7	-7	-2	1	1	-2
Total red meat	38,442	9,672	9,683	10,139	10,269	39,763	9,594	9,995	9,905	9,908	39,402
% change	-2	2	5	5	2	3	-1	3	-2	-4	-1
Broilers 2/	15,502	3,996	4,079	4,035	4,015	16,124	4,127	4,250	4,300	4,200	16,877
% change	9	7	4	2	3	4	3	4	7	5	5
Turkeys 2/	3,717	837	981	1,066	1,040	3,923	802	1,000	1,100	1,100	4,002
% change	19	25	13	-3	-4	6	-4	2	3	6	2
Total poultry 3/	19,772	4,986	5,210	5,213	5,180	20,587	5,066	5,390	5,525	5,430	21,411
% change	10	10	6	0	1	4	2	3	6	5	4
Total red meat and poultry	58,214	14,658	14,893	15,352	15,449	60,350	14,660	15,385	15,430	15,338	60,813
% change	2	5	5	4	2	4	0	0	3	-1	1
Million dozen											
Eggs	5,802	1,476	1,428	1,421	1,446	5,771	1,391	1,385	1,390	1,435	5,601
% change	2	2	-1	-1	-2	-1	-6	-3	-2	-1	-3
Dollars per cwt											
Prices											
Choice steers, Omaha	64.60	68.28	72.81	66.92	70.14	69.54	73.69	72-74	68-74	69-75	71-74
1000-1100 lb.											
Barrows and gilts, 7-markets	51.69	44.74	45.90	44.24	38.66	43.39	40.78	41-43	40-46	38-44	40-43
Slaughter lambs, Ch., San Angelo	78.08	81.51	69.52	59.02	62.98	68.84	69.29	70-72	59-65	58-64	64-67
Cents per pound											
Broilers, 12-city avg. 4/	47.4	45.4	55.6	66.1	57.9	56.3	59.4	68-70	65-71	55-61	62-65
Turkeys, Eastern region 5/	57.8	48.9	51.4	72.6	72.4	61.3	62.4	70-72	71-77	73-79	69-72
Cents per dozen											
Eggs	61.6	55.0	53.3	72.9	67.3	62.1	78.6	73-75	72-78	72-78	74-77
New York 6/											

1/ Forecast. 2/ Federally inspected. 3/ Includes broilers, turkeys, and mature chickens. 4/ Wholesale weighted average. 5/ Wholesale, 8- to 16-pound young hens. 6/ Cartoned, consumer Grade A large, sales to volume buyers. Livestock, poultry, and eggs

Factors Affecting Livestock and Poultry

The economy remains strong, providing support for livestock and poultry prices. However, economic indicators show a slowing in the rate of growth and increases in the cost of borrowed money.

Continued growth is expected in the general economy for 1989, but at a slower pace than the rapid growth in late 1987 and 1988. Overall economic growth slowed in the first quarter of 1989, as the Federal Reserve Board tightened interest rates to curb inflation. Industrial production remained flat in February and March, after growing 5.7 percent in 1988. Real gross national product (GNP) growth for 1989 is expected to be 2.5 to 3 percent, compared with 3.9 percent in 1988. Overall capacity utilization slipped in the first quarter, the first time in over a year. And housing starts, which are very sensitive to interest rates, fell substantially in the first quarter.

Consumer prices rose at an annual rate of 6.1 percent between December 1988 and March 1989, largely on the strength of the run-up in crude oil prices and some increases in food prices. Despite the inflation increase, there will be less pressure on the Federal Reserve to tighten money supplies further in the coming quarters, because overall production is slowing, which suggests rates may fall in the second half of the year. Inflation for 1989 is forecast in the 4 to 4.5 percent range.

Interest rates rose in the first quarter. Short term interest rates rose about 80 basis points across all types of securities. In March, the bank prime rate, at 11.5 percent, was 3 percentage points ahead of the March 1988 level. The prime rate is expected to average 10.8 to 11.8 percent in 1989, compared with 9.3 percent in 1988.

Despite the lowest unemployment rate in 15 years, employment growth slowed at the end of the first quarter. The number of nonfarm payroll jobs gained averaged 150,000 in March and April, compared with a 320,000 average monthly job gain in the previous 12 months. Most of the slowdown has occurred in manufacturing and construction jobs, which tend to pay more on average than jobs in service industries. This suggests that income growth may slow somewhat in the coming quarters. Personal income growth was brisk in the first quarter, rising 3.6 percent. This compares with 7.5 percent growth for all of 1988. Growth was affected by January's pay raise for Federal employees and cost of living increases in some Federal transfer payment programs.

The 1989/90 feed grain crop is projected to be 233.1 million metric tons, up 56 percent from 1988/89, because of more acreage planted and a rebound in yields. Producer planting intentions as of March 1 indicate prospective planted acreage for the four feed grains are about 108 million acres, 6 per-

cent above a year ago. Corn acreage intentions were up 8 percent. Intentions for other feed grains include: sorghum, up 14 percent; oats, down 5 percent; and barley, down 1 percent. Soybean intentions were 5 percent above a year ago.

Feed costs are expected to be lower than the drought impacted prices of last summer. Corn prices for 1989/90 are forecast to be 75 to 80 cents below the \$2.45 to \$2.70 a bushel for 1988/89. Soybean meal prices are expected to be \$140 to \$180 per ton for the 1989/90 crop year, compared with \$230 to \$240 per ton in 1988/89.

Poultry and Eggs

Broilers

Broiler Production Increase Continues

Broiler producers continue to expand production in response to continued profitability associated with strong prices. Broiler production is expected to increase nearly 5 percent in 1989, compared with 4 percent in 1988. First quarter production was up 3 percent over the corresponding period in 1988. Second, third, and fourth quarter production is projected to increase 4, 7, and 5 percent, respectively. The expansion expected in the second half of 1989 will be aided by expected declining feed costs.

Production growth in the second and third quarters is indicated by both increased broiler chick hatch, weekly chick placements, and broiler eggs set. Chick hatch during February and March was up 3 and 4 percent, respectively, compared with a year earlier. Weekly broiler chick placements and broiler eggs set during April were up over 4 percent and 7 percent, respectively.

Table 2--Federally inspected young chicken slaughter, 1987-89

Year	Number	Average weight	Live-weight	Certified RTC
	Million	Pounds	- Million pounds -	
1987:				
I	1,188	4.33	5,149	3,735
II	1,252	4.29	5,365	3,907
III	1,302	4.20	5,470	3,966
IV	1,230	4.35	5,355	3,895
Year	4,971	4.29	21,333	15,502
1988:				
I	1,267	4.35	5,511	3,996
II	1,303	4.30	5,611	4,079
III	1,316	4.19	5,530	4,035
IV	1,272	4.36	5,555	4,015
Year	5,159	4.30	22,208	16,124
1989:				
I 1/	1,307	4.35	5,682	4,126

1/Preliminary.

The estimated size of the hatching egg flock, containing primarily broiler hatching egg type hens, is an indicator of the egg laying capacity to produce broilers about 2.5 months from the time of the flock size estimate. On March 1 and April 1, the hatching egg flocks were 3.5 and 4.4 percent, respectively, larger than a year earlier. Since the hatching egg flock also contains some table egg-type hens, it should be used only as a rough estimator of broiler egg production in future periods.

October Hatchery Supply Flock Increases

The estimated broiler hatchery supply flock, a much longer term indicator of production directions than the hatching egg flock, is estimated by summing broiler pullets placed in the flock during the period 7-14 months earlier. Summing place-

ments between February 1988 and March 1989 gives an estimate of the broiler hatchery supply flock for October 1989. The estimated hatchery supply flock for August through October 1989 is increasing, with October up 2 percent compared with a year earlier, indicating intentions by broiler producers to expand further.

Broiler Prices Strong

Broiler prices for the first quarter averaged 59 cents per pound, 28 percent above the 46 cents of a year earlier. Broiler prices continued strong into the spring, despite increased production. The 12-city composite wholesale broiler price for April averaged almost 64 cents per pound, well above the 49 cents per pound of April 1988. Prices in early May moved above 70 cents per pound, near the 1988 high of

Table 3--Broilers: Eggs set and chicks placed weekly in 15 commercial States, 1988-89 1/

Period 2/ Month and day 2/	Eggs set			Chicks placed		
	1988	1989	Change from previous year	1988	1989	Change from previous year
	- - - Thousands - - -	- - - Thousands - - -	Percent	- - - Thousands - - -	- - - Thousands - - -	Percent
January:						
7	120,343	123,924	3.0	97,828	96,455	-1.4
14	119,110	120,196	0.9	96,217	98,766	2.6
21	117,221	123,060	5.0	95,821	99,037	3.4
28	116,189	124,909	7.5	95,485	98,472	3.1
February:						
4	120,360	125,503	4.3	94,646	95,785	1.2
11	121,008	126,105	4.2	92,688	97,428	5.1
18	122,182	126,909	3.9	91,743	99,542	8.5
25	123,274	127,505	3.4	95,904	101,011	5.3
March:						
4	122,655	127,649	4.1	96,675	100,500	4.0
11	122,548	128,064	4.5	98,042	100,464	2.5
18	122,294	128,159	4.8	98,992	102,085	3.1
25	120,499	127,530	5.8	98,633	102,691	4.1
April:						
1	123,171	129,919	5.5	98,344	102,082	3.8
8	121,617	130,910	7.6	99,206	101,730	2.5
15	122,862	131,007	6.8	96,838	102,758	6.1
22	121,565	131,202	7.9	98,733	103,511	4.8
29	120,460	130,487	8.3	98,592	104,543	6.0

1/ 15 States: Ala., Ark., Calif., Del., Fla., Ga., Md., Miss., N.C., Pa., S.C., Tenn., Tex., Va., and W. Va.
2/ Weeks in 1989 and corresponding weeks in 1988.

Table 4--Broiler chicks hatched and pullet chicks placed in hatchery supply flocks, 1987-89

Month	Broiler-type chicks			Pullet chicks placed in broiler hatchery supply flocks					
				Monthly placements			Cumulative placements 7-14 months earlier		
	1987	1988	1989	1987	1988	1989	1987	1988	1989
	Thousands								
January	439,442	468,333	481,284	4,077	3,389	3,820	29,039	33,028	31,691
February	405,252	432,813	442,816	3,699	4,038	3,963	29,427	33,254	31,539
March	456,081	483,353	502,466	4,111	4,538	4,396	29,523	32,805	31,470
April	455,679	464,386		4,713	3,831		29,722	32,185	32,043
May	473,827	487,027		4,055	4,197		30,148	32,612	32,136
June	461,421	473,782		4,181	3,818		30,242	32,264	31,194
July	463,321	473,394		3,995	3,611		30,603	31,668	31,513
August	455,676	479,734		3,974	4,048		30,742	31,002	31,136
September	433,769	455,183		3,457	3,962		30,926	30,859	31,281
October	441,893	456,819		4,126	4,131		31,365	31,402	32,066
November	423,147	437,967		3,763	3,596		32,232	31,259	
December	469,720	488,248		4,117	4,150		32,693	31,999	

Figure 1
Wholesale Broiler Prices

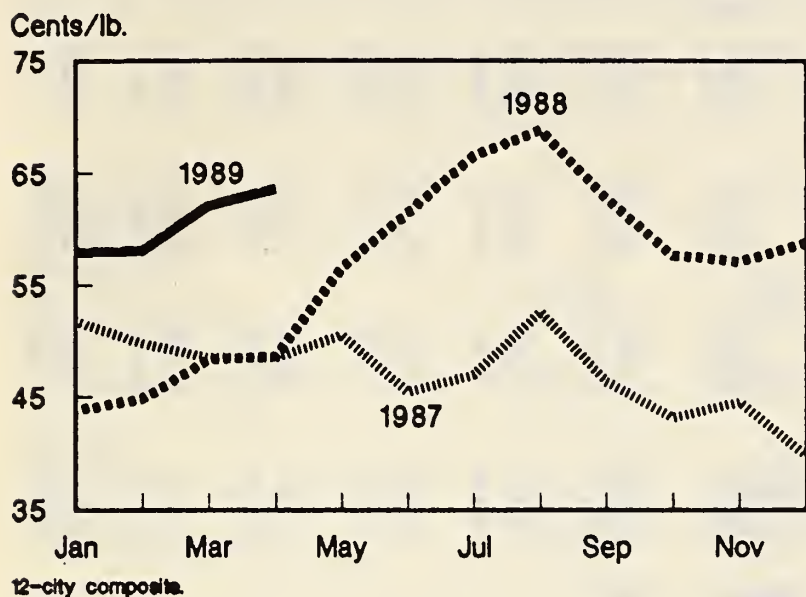
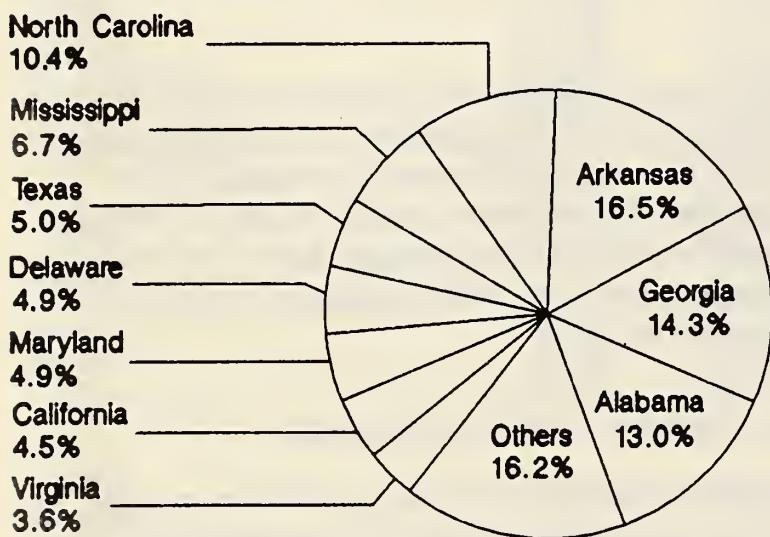


Figure 2
Arkansas and Georgia Lead In Broiler Production



Share of total production, 1988.

Table 5--Broilers: Production and value, 1980-88 1/

Year	Produced		Price/lb.	Value of sales
	Number	Pounds		
	- - Thousands - -	- -	Cents	1,000 dollars
1980	3,963,211	15,538,573	27.7	4,302,818
1981	4,147,521	16,519,568	28.4	4,699,379
1982	4,148,970	16,759,860	26.9	4,502,214
1983	4,183,660	17,037,998	28.6	4,872,707
1984	4,282,391	17,862,944	33.7	6,017,504
1985	4,478,749	18,850,790	30.1	5,680,188
1986	4,646,312	19,651,075	34.5	6,780,124
1987	5,002,934	21,520,242	28.7	6,175,721
1988 2/	5,235,605	22,455,150	33.1	7,432,451

1/ Data reported on December-November marketing year.
2/ Preliminary.

Table 6--Nonbroiler chickens: Production and value of sales, 1980-88 1/

Year	Sales		Price/lb.	Value of sales
	Number	Pounds		
	1,000 head	Thousands	Cents	\$1,000
1980	238,495	1,167,017	11.0	128,268
1981	238,576	1,187,255	11.1	132,271
1982	242,027	1,158,703	10.3	118,915
1983	236,710	1,158,551	12.7	147,454
1984	224,664	1,067,729	15.9	169,732
1985	220,395	1,029,146	14.8	152,175
1986	216,338	1,019,446	12.5	127,572
1987	216,487	1,019,376	11.0	112,129
1988 2/	224,458	1,047,031	9.2	96,346

1/ Data reported on December-November marketing year.
2/ Preliminary.

Table 7--Estimated costs and returns, 1987-89 1/

Year	Production costs		Wholesale		Net returns
	Feed	Total	Total costs 2/	Price 3/	

Market eggs (cents/doz.)					
1988:					
I	26.1	44.3	64.8	57.1	-7.8
II	27.1	45.3	65.8	54.6	-11.2
III	34.1	52.3	72.8	73.6	0.7
IV	33.5	51.7	72.2	70.4	-1.8
Year 4/	30.2	48.4	68.9	63.9	-5.0
1989:					
I 5/	32.8	51.0	71.5	82.3	10.8
II					
III					
IV					
Year 4/					
Broilers (cents/lb.)					
1988:					
I	15.4	23.4	45.6	45.7	0.1
II	15.3	23.3	45.5	55.7	10.2
III	19.0	27.0	50.4	66.1	15.6
IV	19.7	27.7	51.4	57.2	5.8
Year 4/	17.3	25.3	48.2	56.2	8.0
1989:					
I 5/	19.1	27.1	50.5	59.2	8.7
II					
III					
IV					
Year 4/					

1/ Costs and prices are weighted by monthly production. 2/ Based on farm cost converted to wholesale market value. 3/ Wholesale prices used are the 12-metro area egg price, 12-city weighted average broiler price, and a weighted average of 8-16 lb. young hens and 14-22 lb. toms in Central, Western, and Eastern Regions. 4/ Weighted average.

Table 8--Young chicken prices and price spreads, 1986-89

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Cents/lb.													
Farm price 1/:													
1986	30.6	29.2	29.7	29.5	32.2	35.4	42.7	43.9	36.5	39.3	34.9	30.4	34.5
1987	31.0	30.0	29.0	29.2	29.9	27.6	27.6	31.7	27.8	25.1	26.3	24.6	28.3
1988	27.1	25.7	27.5	28.0	33.5	36.7	42.1	41.9	39.2	37.5	35.0	35.5	34.1
1989	35.3	35.2	38.7										
Wholesale RTC													
12-city avg. 2/:													
1986	51.7	49.0	50.3	50.0	54.6	58.3	69.1	69.7	61.0	61.6	57.5	50.0	56.9
1987	51.8	49.8	48.5	48.6	50.5	45.5	47.0	52.6	46.4	43.2	44.6	39.8	47.4
1988	43.9	44.9	48.1	48.7	56.6	61.5	66.5	68.9	62.8	57.7	57.1	58.8	56.3
1989	58.0	58.1	61.5										
U.S. avg.													
retail price:													
1986	76.6	77.1	76.7	75.2	76.9	79.5	88.9	95.8	91.0	90.0	87.8	86.5	83.5
1987	82.1	83.2	80.4	79.2	78.2	77.1	75.5	78.5	79.3	79.1	75.6	73.6	78.5
1988	74.0	74.5	75.3	76.0	79.6	86.8	93.7	96.1	97.5	93.2	89.2	88.5	85.4
1989	90.5	89.9	91.3										
Price spreads													
retail-to-cons.:													
1986	19.5	21.8	21.0	19.2	16.3	15.5	16.4	20.0	21.6	20.5	22.6	30.0	20.4
1987	24.3	26.8	25.2	25.3	21.2	18.7	21.2	20.2	33.1	30.2	25.2	26.1	24.8
1988	23.7	24.4	21.6	20.5	16.5	18.0	22.8	21.9	29.9	28.8	26.7	24.0	23.2
1989	27.3	28.6	24.9	29.4									
1982-84 = 100													
Retail pr. index													
wh. chickens:													
1986	105.0	105.6	106.0	103.9	106.1	109.8	121.9	132.3	125.5	124.9	123.0	121.0	115.4
1987	119.5	118.7	115.2	113.1	112.9	111.6	109.9	113.9	114.6	113.0	109.2	107.7	113.3
1988	107.9	109.5	110.3	111.6	117.4	125.9	137.4	140.1	142.0	136.0	131.7	131.0	125.1
1989	133.7	133.2	135.6	138.0									

1/ Liveweight. 2/ 12-city composite weighted average.

73 cents per pound. Prices are expected to continue strong into the summer months. Wholesale prices for the second and third quarters are expected to average from 68-71 cents and 65-71 cents per pound, respectively. Prices are expected to fall to the 55-61 cent per pound range in the fourth quarter, reflecting large supplies and seasonal patterns.

Broiler Returns Strong

Profitability in the broiler industry continues, encouraging continued expansion. With the exception of a short period in late 1987 and early 1988, net returns to broiler production have been positive since 1983. Net returns for all of 1989 are expected to be in the 7-10 cent per pound range. Feed costs, the largest component of the costs of production, should decline as the year progresses to levels well below the drought impacted prices of 1988.

Increased Per Capita Consumption Continues

Per capita consumption of broilers is expected to increase 4-5 percent in 1989. This rise reflects projected increased

production and strong consumer demand for broilers. Estimated broiler production, adjusted for anticipated exports, shipments, and stock levels, indicates per capita broiler consumption will climb to about 64-65 pounds in 1989 from 62 pounds in 1988. Broilers represent about 29 percent of the estimated annual per capita red meat and poultry consumption for 1989.

Annual Production and Value Increases

The number of broilers raised during the 1988 marketing year (5.2 billion birds) rose almost 4.6 percent from the previous year, and reached a new record. The estimated value of production (\$7.4 billion) jumped 20 percent, reflecting the strength in prices during the second half of 1988.

Arkansas continued to produce the most broilers, with 896 million birds valued at \$1,250 million. Georgia and Alabama followed, with 773 million and 703 million birds valued at \$1,071 million and \$936 million, respectively.

Table 9--Commercial broilers and turkeys: Number produced or raised by States and regions, by years, 1986-88 1/

State and region	Commercial broilers produced 1/ 2/			Turkeys raised, all breeds 3/ 4/		
	1986	1987	1988	1986	1987	1988
Thousands						
Connecticut				40	30	30
Maine	5/	5/	5/			
Massachusetts				145	140	150
New Hampshire				26	26	26
New Jersey					100	115
New York	2,000	2,100	2,500	343	437	343
Pennsylvania	101,907	115,635	126,900	7,800	8,000	7,900
Rhode Island						
Vermont						
North Atlantic	103,907	117,735	129,400	8,454	8,748	8,549
Illinois				347	698	1,700
Indiana	5/	5/	5/	9,370	13,000	12,900
Michigan	600	675	750	2,700	3,000	3,000
Ohio	9,900	11,000	12,000	3,100	3,400	3,600
Wisconsin	11,600	13,200	13,100	6,128	5,450	5/
East North Central	22,100	24,875	25,850	21,645	25,548	21,200
Iowa	2,700	2,600	3,000	7,000	8,500	7,800
Kansas				104	193	227
Minnesota	29,700	31,700	33,100	34,200	40,500	38,500
Missouri			54,500	13,500	15,500	16,500
Nebraska	832	1,074	1,129	1,437	1,942	1,772
North Dakota	5/	5/	5/	1,000	1,200	1,200
South Dakota	5/	5/	5/	1,968	2,376	2,370
West North Central	33,232	35,374	91,729	59,209	70,211	68,369
Delaware	196,783	209,818	217,455	7/ 125	7/ 133	7/ 135
Florida	111,884	116,980	123,198			
Georgia	697,364	733,417	772,825	2,426	2,432	2,400
Maryland	263,885	264,196	252,400			
North Carolina	450,500	477,700	500,100	39,100	48,350	47,900
South Carolina	63,801	68,051	70,832	3,900	3,950	5,570
Virginia	154,156	154,036	175,748	14,307	16,200	16,300
West Virginia	29,010	32,770	35,166	2,220	2,400	2,300
South Atlantic	1,967,383	2,056,968	2,147,724	62,078	73,465	74,605
Alabama	587,563	666,538	702,784			
Arkansas	786,779	878,574	896,832	16,500	18,000	18,000
Kentucky	3,012	2,894	2,704			
Louisiana	5/	5/	5/			
Mississippi	335,704	343,39	360,971			
Oklahoma	79,500	90,600	120,900	5/	5/	5/
Tennessee	82,500	92,500	87,000			
Texas	238,600	259,000	266,300	5/	5/	5/
South Central	2,113,658	2,333,501	2,437,491	16,000	16,500	18,000
Alaska						
Arizona						
California	184,832	196,120	212,199	21,900	25,500	26,500
Colorado				5/	5/	5/
Hawaii	2,288	2,311	2,261			
Idaho						
Montana						
Nevada						
New Mexico						
Oregon	15,800	17,000	17,300	1,540	1,830	1,650
Utah				3,390	3,731	3,900
Washington	25,100	26,200	28,200			
Wyoming						
West	225,732	239,320	259,960	26,830	31,061	32,050
Other States 5/	178,012	192,850	143,451	12,500	13,316	19,250
United States 6/	4,646,312	5,002,934	5,235,605	207,216	240,389	242,023

1/ Includes production of other meat-type breeds. 2/ December 1 through November 30 marketing year. 3/ Does not include young turkeys lost; based on turkeys hatched September 1 of previous year through August 31, of the current year. 4/ Calendar year. 5/ Combined to avoid disclosing individual operations. 6/ Excludes States producing less than 500,000 birds. 7/ Maryland and Delaware combined.

Review and Outlook for U.S. Broiler Exports

U.S. poultry meat exports set a record of 843 million pounds in 1988, surpassing the European Community (EC), and increasing the U.S. share of the slowly growing world market to about 19 percent. These exports included a record 765 million pounds of broiler meat. This surprising performance was achieved despite sharp competition from the EC, Brazil, and Thailand; sharp rises in U.S. chicken meat prices; a drop in Export Enhancement Program (EEP) sales and bonuses; and continued EC export refunds.

The United States increased sales mainly to Japan and other growing economies of the Pacific, and to neighboring countries of Mexico, Jamaica, and Canada. Increased sales of lower priced broiler parts and fewer higher valued whole birds contributed significantly to expanding U.S. exports.

Factors Affecting U.S. Exports

Parts Exports Increasing

February 1989 broiler exports were nearly 73 million pounds, a record, and exceeded last February by 50 percent. Most (96 percent) of the February exports were parts. At the current rate, parts as a share of total broiler exports for 1989 may surpass 1984, when 94 percent of broiler exports were parts (see figure 6). U.S. exporters increased the proportion of parts sales in 1984. U.S. broiler prices were relatively high in 1984 at 56 cents per pound wholesale, U.S. export unit values were high, and the U.S. share of world poultry exports was low, at 12.5 percent. U.S. poultry has im-

Figure 3
Broiler Exports, Whole vs. Parts

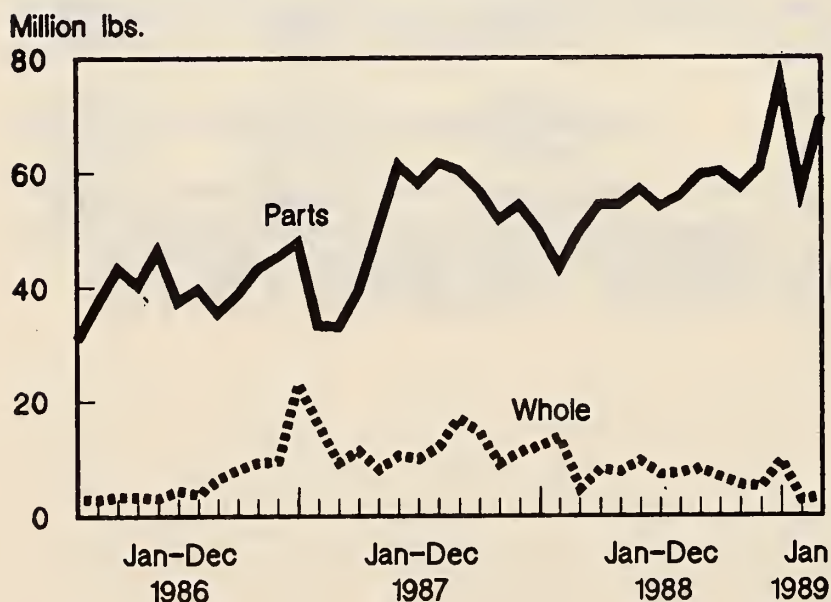
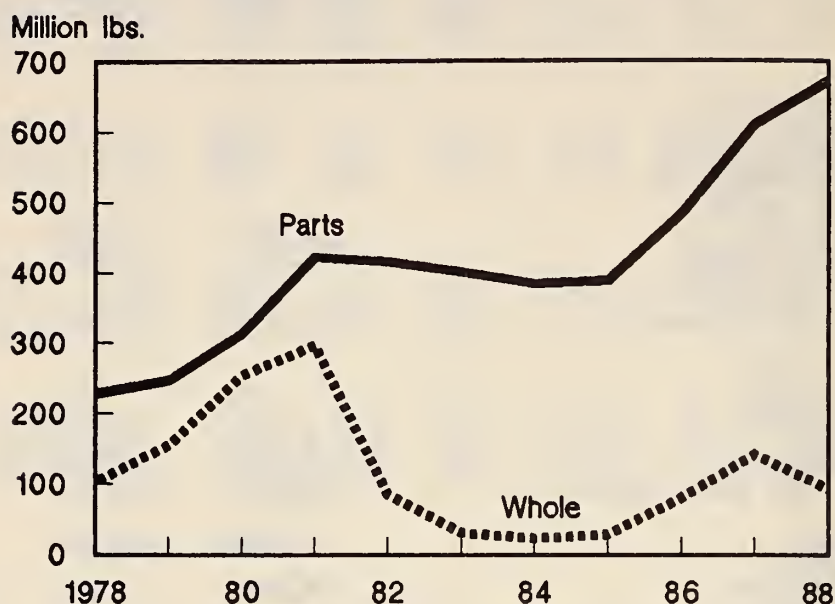


Figure 4
Whole Bird and Parts Exports



proved its competitive position since then, even with higher U.S. prices, aided by the lower foreign exchange value of the dollar and higher world export prices.

While exports of U.S. chicken parts have hit new highs each year since 1986, whole broiler exports peaked in 1980 and 1981 (see figure 7). In 1980 and 1981, 45 and 41 percent of exports were whole birds. During these 2 years the countries of Egypt, Iraq, and Venezuela were large buyers of whole birds. But in 1982 declining oil revenues caused Venezuela's imports to drop, while Egypt and Iraq imported nothing. Whole bird exports recovered with the large EEP sales made mainly during 1986 and 1987, particularly to Iraq and Egypt. These sales represented about 46 percent of whole birds. Whole bird exports dropped, while parts resumed their growth when EEP exports slowed down during 1988.

The ability of U.S. producers to export relatively low-priced parts while domestic whole bird and breast prices are high enhances competitiveness in the export market. The complementarity between expanding export and domestic markets simultaneously is an important incentive for producers to develop export markets. U.S. wholesale broiler prices had been fairly steady at about 58 cents per pound from November 1988 through February 1989, but in February increased to about 30 percent above a year earlier. Yet, the average unit export value for parts in February has been below 58 cents. Parts exports were up 45 percent through February of this year compared with a year earlier.

Brand names, long used successfully in the United States by poultry firms, may also succeed internationally. One major broiler exporter, while using brand names in the United States since 1962, did not begin using them overseas until 1987. Aided by the FAS/USA Poultry and Egg Council's program, brand promotion has helped to increase U.S. exports to Japan. Joint ventures with Japanese firms also help to open Japanese retail outlets.

Prices and Competition

U.S. broiler production levels and expected higher prices this summer will be a factor in short term U.S. export competitiveness. In early May, U.S. wholesale prices of over 70 cents per pound were well above the 57 cents per pound average export unit value of February exports of whole broilers. Prices of leg quarters and most parts have also been rising since the lows of December 1988.

Export sales are generally very price competitive. For example, Iraq has been negotiating prices for months with few if any sales. Iraq has offered to pay about 50 cents per pound for whole chicken, delivered. Jordan recently purchased frozen chicken from France for 52-53 cents, cash, per pound delivered to Aqaba. U.S. prices would not currently be competitive here. The Canadian market provides a good example of a location where U.S. prices are competitive, and it will be covered in the next section.

Relatively high prices for beef are a factor in the world poultry meat trade. Chicken meat is attractive as a lower cost meat, especially in countries where food price inflation is an issue. World red meat production increased very little during 1988, and projections for 1989 are flat. Some countries where relatively low-priced chicken meat is an important dietary component, and where it plays an important role in world trade, include Mexico, Brazil, Jamaica, Jordan, and other Middle East countries. Higher world feed prices, and/or reduced availability, recently have slowed poultry meat production in some countries, and will contribute to a relatively moderate increase of about 4 percent in 1989's world poultry meat production.

Canada

The controlled Canadian market is a special case of a nearby outlet with a fast-food sector similar to that of the United States. Sales to Canada are generally at relatively high prices. For example, the average export unit value for February was 75 cents per pound, 23 percent above a year ago. Demands of the Canadian fast-food market, when not met domestical-

ly, are filled by imports from the United States. While the global import quota control system remains in place under the Free Trade Agreement (FTA), supplementary quotas are granted by the Canadian Government to fill obvious consumer demand. The supply and price control system in Canada is not always able to accomplish the difficult task of coordinating all the producing and marketing functions and groups in the industry. Incentive problems may materialize along the production-marketing chain, resulting in shortages which have to be filled by imports.

EC Competition and the EEP

The outlook for U.S. broiler exports is heavily influenced by the policies of other major exporting countries. The EC, Brazil, and Thailand export about 35 percent of world poultry meat. Competition in U.S. broiler export markets is intense and centered in the Far East (mainly Japan) and in the Middle East. France continues price cutting in the Middle East, including Egypt. The EC reduced its poultry meat export refunds in October 1988, but still maintains them at a substantial level. For whole birds, EC refunds continue to be highest to the Middle East and Singapore. The highest EC refund in this category is about 27 cents per pound. These counter the EEP bonuses of the United States. EEP bonuses for whole birds have not been paid since May 1988, when they averaged about 30 cents.

The EC reduced its highest refund rate for chicken parts in January. This subsidy applies to all destinations, and is equivalent to about 30 cents per pound. The most recent EEP bonus on parts was 6 cents per pound, paid in March.

Brazil

Brazil reversed its downward trend in broiler exports last year, raising them about 9 percent to 520 million pounds. Brazil increased exports of whole birds to Saudi Arabia to about 233 million pounds, supplying slightly over 50 percent of that market. Brazil also increased its exports of parts to Japan to about 84 million pounds, much above any previous level. Finally, Brazil was an important supplier to the Persian Gulf States and Cuba.

Brazil's current exporting ability may depend on the Brazilian Government's domestic policy on meat products. During 1989, higher beef prices in Brazil are causing larger domestic consumption of poultry meat. If poultry production fails to increase, which is the apparent expectation of the Brazilian Poultry

Producers Association, Brazilian exports may not rise this year. The Government may consider restraining them.

Broiler Export Outlook

U.S. broiler exports for 1989 are expected to be close to the levels of the last 2 years. Clearly, U.S. and world supply and demand conditions influence U.S. broiler exports. Keen competition is expected to continue, especially from the EC and Brazil in the Middle East, and from Thailand in Japan. Thailand will benefit from Japan's reduction of the import tariff on

deboned chicken from 14 to 12 percent, effective April 1. Among importers, Japan, other Pacific countries, Mexico, Canada, and the Caribbean will again be key markets. An important factor will be U.S. price levels later this year. U.S. prices are expected to rise through the summer months, and this could slow down exports.

Finally, the U.S. policy on EEP and importer policies will play a role. In 1988, the poultry EEP had a small impact, and exports were also constrained by restrictions on imports by Egypt and Iraq. Restrictions on imports by the private sector have been continued by Egypt.

Turkeys

Turkey Production Declines

Production during the first quarter of 1989 dropped about 4 percent compared with a year earlier, reflecting producers' reaction to losses in the first half of 1988 and higher feed costs. April production also declined by about 3 percent. Production for 1989 overall is still expected to increase about 2 percent. Production during the second quarter is expected to be up about 2 percent over last year. Output in the third quarter may increase about 3 percent and in the fourth quarter about 6 percent above the same periods of 1988. Poult placements in both March and April were 7 percent above that of a year earlier. This is the highest year-to-year increase since February 1988, and indicates producer intentions to increase output. Total cumulative poult placements from September 1988 through April 1989 were 4 percent above a year earlier.

Table 10--U.S. broiler exports to major importers, January-February 1988-1989

Country or area	1988	1989
	1,000 lb.	
Japan	26,377	47,249
Hong Kong	15,147	25,040
Mexico	5,076	12,986
Jamaica	7,659	10,983
Singapore	10,133	10,959
Canada	5,518	5,284
French Polynesia	1,686	1,718
Netherlands Antilles	1,974	1,573
Antigua	940	1,317
Spain	1,865	1,182
St. Vincent	235	975
Saudi Arabia	428	926
Other	28,404	12,049
Grand Total	105,442	132,241

Table 11--Federally inspected turkey slaughter, 1987-89

Year	Number	Average weight	Live-weight	Certified RTC
	Million	Pounds	- Million pounds -	
1987				
I	40.9	20.7	846.7	670.1
II	55.4	19.7	1,090.8	864.9
III	69.9	19.9	1,390.7	1,100.1
IV	64.8	21.1	1,365.5	1,081.9
Year	231.1	20.3	4,693.7	3,717.1
1988				
I	50.3	21.0	1,054.0	836.6
II	60.0	20.6	1,236.3	981.1
III	65.7	20.4	1,343.3	1,065.6
IV	61.4	21.4	1,314.2	1,040.1
Year	237.4	20.8	4,947.7	3,923.4
1989				
I 1/	47.8	21.1	1,010.3	802.2

1/ Preliminary.

Table 12--Turkey hatchery operations, 1986-89 1/

Total turkeys placed 2/			Eggs in incubators first of month, changes from previous year			
1986-87	1987-88 3/	1988-89	1986-87	1987-88	1988-89	
- - Thousands - -			- - - Percent - - -			
Sept.	13,620	15,024	15,725	18	16	7
Oct.	14,135	16,743	16,821	17	18	5
Nov.	13,836	17,714	18,413	11	21	4
Dec.	17,705	19,956	20,444	18	15	6
Jan.	21,646	22,315	23,149	27	10	4
Feb.	21,265	23,100	23,675	14	8	6
Mar.	25,401	25,101	26,892	19	4	5
Apr.	26,703	24,718	26,366	17	-1	6
May	26,623	25,559		16	-5	9
June	27,265	26,075		15	-3	
July	25,999	23,677		19	-5	
Aug.	19,889	19,458		22	-5	

1/ Breakdown by breed not shown to avoid disclosing individual operations. 2/ Excludes exported poults. 3/ Includes revised calendar year 1987 numbers.

Stocks Lower

Total turkey stocks on April 1 were 267 million pounds, 21 percent lower than the record of a year earlier, and were rising slowly from the January low. Stocks usually climb until the end of the third quarter. Stocks other than whole turkey have been declining since August 1988, to 95.6 million pounds on April 1. This is the lowest since July 1987.

Prices Rose Sharply through April

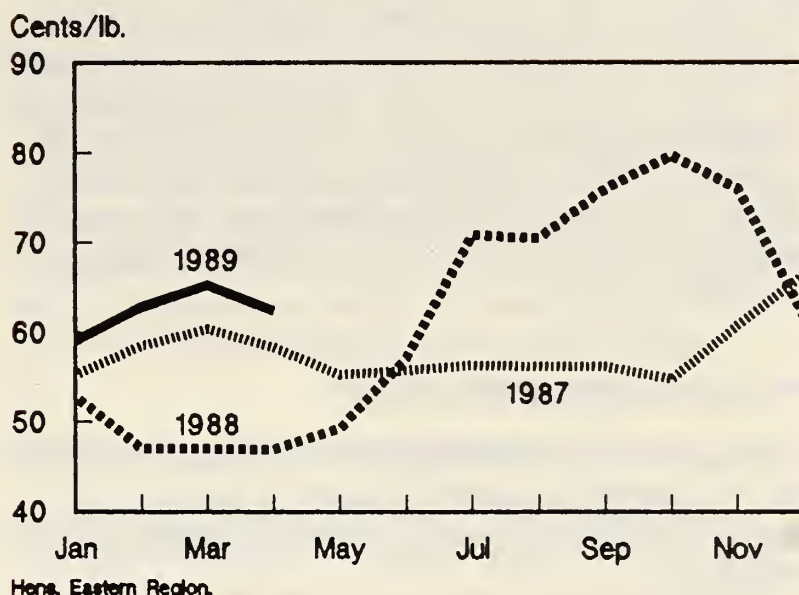
Turkey prices have increased during the first 4 months of 1989, particularly in comparison with the relatively low prices of the same period a year earlier. Stocks were high a year ago, and production during first quarter 1988 was up 25 percent over 1987. This year, the patterns of the price increases point to some interesting marketing aspects.

Wholesale Eastern Region hen prices were up 32 percent. Given moderate stocks and current low production, prices are expected to increase further and hens could average 69-72 cents for the year. After averaging 62.4 cents during the first quarter, wholesale hen prices are expected to average 70-72 cents during the second quarter, 71-77 cents in the third, and 73-79 cents in the fourth.

Parts prices have increased more sharply than whole birds. Wholesale breast prices, Eastern Region, averaging \$1.28 per pound during the first 4 months of 1989, were up 48 per-

Figure 5

Wholesale Turkey Prices



cent compared with a year earlier. Drumsticks at 36 cents and wings at 31 cents were up 83 and 75 percent, respectively. Consumer demand for whole birds, however, has been relatively weak; retail prices during the first quarter 1989 averaged 97 cents per pound, only 5.4 percent above the weak prices of first quarter 1988. Increased demand for further processing use, not the retail purchases of whole birds, is the main factor pushing prices higher.

Table 13--Turkey prices and price spreads, 1986-89

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
Cents/lb.													
Farm price 1/:													
1986	35.6	36.3	36.9	38.1	40.9	45.9	49.3	50.9	51.4	53.0	51.5	43.0	44.4
1987	35.1	35.8	35.7	36.3	35.5	34.1	33.5	32.1	31.3	30.2	34.0	38.4	34.3
1988	31.8	29.0	28.2	28.4	29.7	31.6	39.4	41.6	45.7	47.8	47.6	37.6	36.5
1989	35.4	38.3	40.0										
New York, hens, 8-16 lbs 2/:													
1986	60.3	61.7	63.9	64.6	67.1	73.8	77.9	80.5	81.2	83.2	80.7	71.1	72.2
1987	55.3	58.5	60.3	58.3	55.3	55.7	56.3	56.1	56.1	54.7	60.7	66.5	57.8
1988	52.8	47.1	47.0	46.9	49.2	57.1	70.8	70.5	76.0	79.6	76.0	61.6	61.2
1989	59.0	62.8											
4-region average retail price, wholebirds:													
1986	106.3	107.8	104.8	104.2	103.4	102.3	105.6	109.5	111.9	112.9	108.1	102.1	106.6
1987	103.6	103.2	103.0	100.4	102.8	105.1	105.8	105.1	103.3	102.6	90.0	89.3	101.2
1988	93.1	92.9	91.0	89.4	92.9	92.9	96.0	99.5	100.6	104.0	99.2	97.1	95.7
1989	97.4	96.8	97.6										
Price spreads, retail-to-consumer:													
1986	33.7	36.7	32.5	31.3	27.1	19.0	19.3	19.5	21.7	20.2	16.2	21.8	24.9
1987	39.8	37.4	35.4	33.4	37.3	40.1	41.1	41.8	39.0	38.3	22.0	13.5	34.9
1988	29.8	35.0	33.4	33.0	35.1	24.6	23.7	21.0	17.3	16.5	14.7	26.7	25.9
1989	29.8	29.9	25.7	23.2									
1982-84 = 100													
Consumer pr. index 3/:													
1986	111.6	112.5	111.1	109.7	110.5	109.8	110.9	111.7	114.5	117.1	113.9	112.3	112.1
1987	113.3	111.6	112.0	109.6	111.6	111.8	112.1	111.6	109.4	109.2	103.5	103.9	110.0
1988	107.7	107.2	107.2	107.5	108.3	109.3	109.8	112.4	114.2	115.5	113.1	113.3	110.5
1989	114.2	116.3	118.7	121.5									

1/ Liveweight. 2/ Wholesale, ready-to-cook. 3/ Other poultry CPI.

Recent Net Returns Encouraging

Feed costs have recently eased from the highs of last fall, and combined with expectations of lower feed costs by this summer, have contributed to producer optimism of increased net returns. Prices received for turkey have been steadily increasing since January, when net returns were substantially negative. With the continued price increases, net returns during April were slightly above breakeven. Net returns for the year are expected to be positive, perhaps averaging 3 to 7 cents per pound.

Per Capita Consumption Constant

Although per capita consumption is still projected to rise for the year, possibly to about 16.5 pounds, it was about 3.2 pounds during the first quarter, unchanged, compared with a year earlier.

Production and Value Up

The number of turkeys raised during 1988, 242 million birds, increased about 1 percent over 1987. Pounds produced, liveweight, however, rose by 4 percent to 5 billion pounds. Producer prices jumped 11 percent over the low level of 1987. The value of 1988 production, increased nearly 15 percent, to a record of almost \$2 billion.

The three top turkey producing States continued to be North Carolina, Minnesota, and California. Their combined production represented 44 percent of the 1988 total. North Carolina raised 47.9 million birds, producing 938.8 million pounds valued at \$338 million. Minnesota raised 38.5 million birds, producing 704.6 million pounds with a value of \$267.7 million. California raised 26.5 million birds, producing 572.4 million pounds valued at \$200.3 million.

Figure 6

North Carolina and Minnesota Lead In Turkey Production

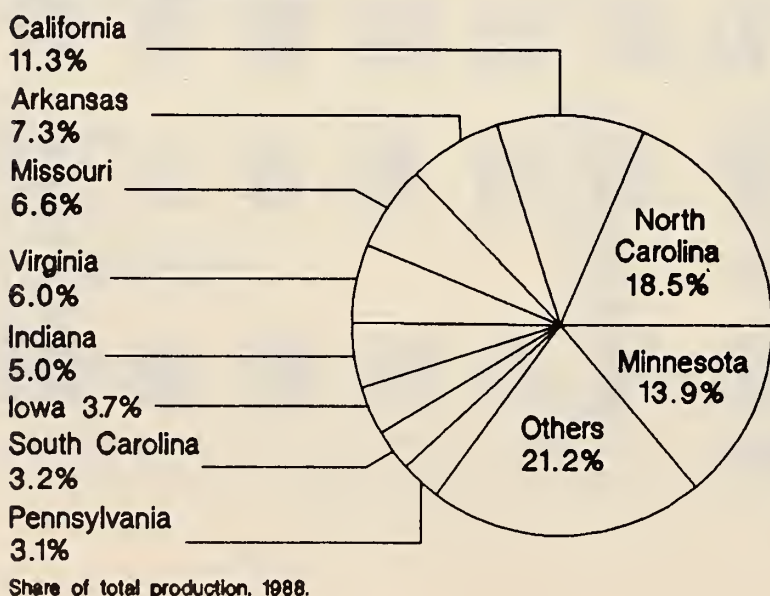


Table 14--Turkeys: Production and value, 1980-88

Year	Number raised	Pounds produced	Price/lb.	Value of sales
	- - Thousands - -		Cents	\$1,000
1980	165,243	3,076,858	41.3	1,271,637
1981	170,875	3,264,463	38.2	1,247,803
1982	165,464	3,175,060	39.5	1,254,700
1983	170,723	3,335,519	38.0	1,269,051
1984	171,296	3,385,721	48.9	1,655,256
1985	185,352	3,702,194	49.1	1,818,626
1986	207,216	4,141,697	47.1	1,948,438
1987	240,389	4,893,707	34.8	1,702,784
1988 1/	242,023	5,069,466	38.6	1,954,750

1/ Preliminary.

Turkey Exports

Turkey exports through February were very slow at about 5 million pounds, only 55 percent compared with a year earlier. Mexico took one-third, followed by Canada, with one-tenth. The average export unit value of U.S. turkey surged 36 percent, to 53 cents per pound compared with the January-February period of a year earlier; this rise helps explain the decline in exports.

Also, two leading buyers of turkey parts a year ago, Taiwan and Egypt, have imported no U.S. turkey through February. While Taiwan has granted quotas for imports of U.S. turkey parts, concerns about Taiwan's bacteriological testing have hindered a resumption of trade. Egypt has tightened restrictions on poultry meat imports since last year.

Table 15--U.S. turkey exports to major importers, January-February 1988-1989

Country or area	1988	1989
	1,000 lb.	
Mexico	227	1,702
Canada	649	535
Western Samoa	243	411
Hong Kong	327	407
Ivory Coast	51	382
France	0	282
Micronesia	103	252
Japan	401	154
Marshall Islands	161	134
St. Lucia	3	130
South Africa	125	109
Other	7,111	689
Grand Total	9,401	5,187

Table 16--U.S. mature chicken exports to major importers, January-February 1988-1989

Country or area	1988	1989
	1,000 lb.	
Netherlands Antilles	89	852
Mexico	88	521
St. Lucia	357	461
Jamaica	167	257
Antigua	0	224
St. Christ.-Nevis	0	208
Grenada	88	198
Canada	296	143
Aruba	1	133
Dominica	0	85
Other	3,361	460
Grand Total	4,747	3,542

Eggs

Egg Supplies Down

Total egg production will likely decline about 3 percent in 1989, reflecting producer adjustments to negative returns in 1987 and 1988. First quarter 1989 production declined 6 percent compared with a year ago (about 5 percent when production is adjusted for the leap year). The total laying flock on April 1 declined over 3 percent, reflecting a table egg type laying flock about 5 percent smaller than a year ago and a hatching egg flock 4 percent larger. Second, third, and fourth quarter total egg production is expected to slip 3, 2, and 1 percent respectively, from a year earlier. The rate of lay on April 1 was about the same as a year earlier.

Egg Prices Strong

New York wholesale prices for large eggs averaged 79 cents per dozen for the first quarter of 1989, well above the average of 55 cents of the first quarter of 1988. Egg prices peaked in mid-March at 99 cents per dozen, reflecting reduced supplies and Easter buying. While prices have dropped seasonally since March, tightened supplies are expected to keep prices relatively strong through the year, ranging from 73-75 cents per dozen for the second quarter and 72-78 cents per dozen for the third and fourth quarters.

Positive Net Returns in the Egg Industry

Net returns to egg producers turned positive in the first quarter, following losses in all of 1988 except the third quarter. Flock size adjustments and the strong Easter market helped boost net returns for that quarter to about 11 cents per dozen. With production expected to be down for the year, returns to producers should remain positive for the rest of 1989.

California Leading Egg Producer

The number of eggs produced during the 1987/88 marketing year (December/November), 5.79 billion dozen, was unchanged from the previous year. The value of production dropped almost 4 percent, from \$3.18 to \$3.06 billion. California continued as the leading egg producing State, with 643 million dozen valued at \$298 million, representing a reduction of 26 million dozen eggs and almost \$10 million in value from 1987/88. California was followed by Indiana, with 470 million dozen valued at \$204 million; and Pennsylvania, with 442 million dozen valued at \$186 million.

Decline in Per Capita Consumption To Continue

Per capita egg consumption fell by about 5 eggs during 1988, and is expected to decline by another 9 eggs in 1989, to 235 eggs. The continuing downward trend in egg consumption can be attributed to changing demographic factors, health concerns about cholesterol, and negative publicity linking eggs with outbreaks of Salmonella enteritidis.

Pending reductions in USDA reported values of the cholesterol content of eggs may help allay some concerns over egg cholesterol. Results of the analysis reduce the estimated normal cholesterol content from 274 mg to 213 mg per large egg. This reduction is attributed in part to improved analytical techniques, but mostly to an overall reduction in the fat content of the egg yolk from 5.58 grams to 5.01 grams per large egg. If these new results influence health organizations to revise their egg consumption recommendations, there may eventually be a positive impact on egg demand.

Table 17--Eggs: Production and value, 1980-88 1/

Year	Average layers on hand during the year	Produced		Price /doz.	Value of production
		Per layer on hand during year	Total		
	Thousands	Number	Millions	Cents	\$1,000
1980	287,705	242	69,686	56.3	3,267,563
1981	287,774	243	69,825	63.1	3,671,143
1982	286,369	244	69,718	59.5	3,458,873
1983	276,263	247	68,169	61.1	3,469,368
1984	278,022	245	68,230	72.3	4,110,920
1985	276,680	247	68,407	57.1	3,252,519
1986	276,260	247	68,398	61.6	3,510,273
1987	280,564	248	69,351	54.9	3,178,185
1988 2/	277,050	251	69,476	52.8	3,058,998

1/ Data cover both farm and commercial flocks. Data reported on December-November marketing year.
2/ Preliminary.

Figure 7
Wholesale Egg Prices

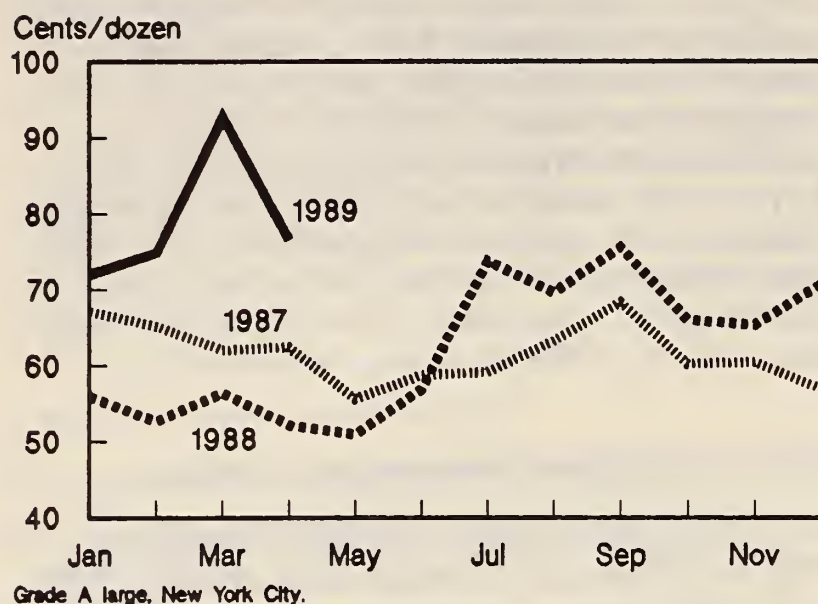


Table 18--Eggs and poultry:
Value of production, 1980-88 1/

Year	Value of production			Value of sales Nonbroiler	Total
	Eggs	Broilers	Turkeys		
	1,000 dollars				
1980	3,268	4,303	1,272	128	8,971
1981	3,671	4,699	1,248	132	9,750
1982	3,459	4,502	1,255	119	9,335
1983	3,469	4,873	1,269	147	9,758
1984	4,111	6,018	1,655	170	11,954
1985	3,253	5,680	1,819	152	10,969
1986	3,510	6,780	1,948	128	12,369
1987	3,178	6,176	1,703	112	11,169
1988 2/	3,059	7,432	1,955	96	12,543

1/ Data (except turkey) reported on December-November marketing year.

2/ Preliminary.

Sources: Nat'l Agr. Stat. Serv. and Econ. Res. Serv., USDA.

Table 19--Layers on farms and eggs produced, 1988-89 1/

Quar- ters	Number of layers		Eggs per layer		Eggs produced	
	1988	1989 2/	1988	1989 2/	1988	1989 2/
	- Million -		- Number -		Million dozen	
I	285	272	62.2	61.5	1,477.6	1,393.2
II	277		63.4		1,467.1	
III	271		62.9		1,419.7	
IV	275		62.2		1,425.6	
Annual	277		250.7		5,789.7	

1/ Marketing year beginning December 1.

2/ Preliminary.

Table 20--Force moltings and light-type hen slaughter, 1987-89

Month	Force molted layers						Light-type hens slaughtered under Federal inspection 1/		
	Being molted			Molt completed			(Number)		
	1987 2/	1988 2/	1989 3/	1987 2/	1988 2/	1989 3/	1987	1988	1989
	- - - Percent - - -						- - - Thousands - - -		
January	4.2	3.8	4.0	20.9	20.9	23.3	13,002	13,574	12,136
February	4.6	5.0	4.9	19.1	20.4	21.5	13,342	14,647	11,908
March	3.8	3.8	4.3	20.1	20.6	21.7	13,450	15,312	13,599
April	2.8	3.9	3.9	19.6	19.4	21.5	14,428	15,034	
May	5.4	5.9		18.8	18.7		12,870	14,115	
June	6.4	7.6		18.5	20.0		13,791	13,158	
July	4.7	6.0		20.5	21.3		12,364	8,601	
August	4.9	4.7		21.0	22.1		12,496	10,555	
September	5.3	4.3		21.7	22.4		10,813	9,119	
October	4.9	4.5		21.3	22.4		12,037	10,426	
November	4.2	3.9		21.4	22.7		11,389	11,374	
December	3.4	3.5		22.4	24.1		15,938	13,694	

1/ Revisions include data from late reports or other corrections developed by the Food Safety and Inspection Service. 2/ Percent of hens and pullets of laying age in 15 selected States. 3/ Percent of hens and pullets of laying age in 20 selected states.

Table 21--Egg-type chick hatchery operations, 1987-1989

Month	Hatch			Eggs in incubators first of month, changes from previous year		
	1987	1988	1989	1987	1988	1989
	Thousands			Percent		
Jan.	34,156	29,274	26,614	5	-4	-20
Feb.	35,815	28,433	27,191	4	-24	2
Mar.	41,708	35,615	32,723	5	-17	-15
Apr.	42,356	34,749		-2	-17	2
May	40,858	35,984		1	-16	
June	37,256	33,049		1	-7	
July	33,375	24,876		-4	-23	
Aug.	34,667	27,838		8	-24	
Sept.	31,800	30,918		4	-10	
Oct.	33,959	31,007		9	-13	
Nov.	30,593	29,425		10	1	
Dec.	31,242	27,181		-7	-11	

Table 22--Egg prices and price spreads, 1986-89

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Cents/doz.													
Farm price 1/:													
1986	58.3	54.0	61.4	49.2	48.8	42.1	51.9	55.3	55.4	50.3	60.0	57.9	53.7
1987	51.7	50.1	46.0	45.8	39.5	40.3	40.8	40.5	49.7	40.9	45.4	38.8	44.1
1988	39.7	37.6	41.2	36.0	32.9	36.5	49.4	50.4	56.4	51.0	51.9	52.4	44.6
1989	56.2	53.7	74.5										
New York (cartoned)													
Grade A, large 2/:													
1986	73.3	68.3	80.8	65.7	65.2	59.2	73.0	72.8	72.6	69.6	77.2	75.5	71.1
1987	67.1	65.2	62.0	62.4	55.6	58.7	59.1	63.2	68.3	60.2	60.5	56.9	61.6
1988	55.9	52.7	56.4	52.1	50.9	56.8	73.6	69.5	75.6	66.0	65.3	70.4	62.1
1989	72.0	71.1											
4-Region average, Grade A, large retail price													
1986	90.1	86.6	88.7	89.0	82.0	79.5	83.3	91.3	86.8	85.5	89.7	91.0	87.0
1987	86.2	82.3	80.0	78.6	76.3	71.1	76.3	73.0	83.7	77.8	80.5	73.1	78.3
1988	76.0	71.8	74.0	71.9	67.8	70.5	80.3	90.9	87.4	89.6	83.9	83.3	79.0
1989	94.1	89.0	103.1										
Price spreads, retail-to-consumer:													
1986	14.9	17.2	10.0	21.9	16.8	20.5	12.1	18.8	14.3	15.4	11.7	14.4	15.7
1987	17.4	14.5	16.5	15.3	20.8	12.7	16.4	15.7	13.6	18.4	18.4	15.4	16.3
1988	19.0	18.2	14.9	20.0	16.5	13.0	7.0	20.5	11.2	22.0	16.0	10.1	15.7
1989	18.2	18.6	10.2	23.1									
1982-84 = 100													
Consumer pr. index:													
1986	101.5	97.4	99.6	98.5	90.7	87.1	91.4	100.7	97.1	97.2	102.2	103.7	97.3
1987	100.8	97.8	93.9	91.1	88.5	84.1	87.8	85.8	97.6	91.4	93.9	85.5	91.5
1988	90.1	85.5	87.9	85.0	81.8	83.6	95.1	104.2	103.1	105.5	101.2	99.6	93.6
1989	112.0	106.1	122.9	117.6									

1/ Market (table) eggs including eggs sold retail by the producer; data not available prior to 1982. 2/ Price to volume buyers.

Table 23--Shell eggs broken and egg products produced under Federal inspection, 1987-89

Period	Shell eggs broken Thou. doz.	Egg products produced 1/		
		Liquid 2/ Thou. lbs.	Frozen Thou. lbs.	Dried Thou. lbs.
1987:				
January	73,724	23,567	29,042	8,981
February	71,122	22,371	27,250	8,159
March	80,467	26,343	31,909	8,725
April	74,135	23,231	27,750	8,428
May	77,451	23,121	28,307	9,242
June	85,391	27,478	27,781	9,788
July	86,461	23,730	30,972	9,622
August	79,928	25,061	27,454	8,356
September	78,419	27,371	28,455	7,157
October	81,959	28,644	34,433	8,504
November	73,557	22,542	29,511	8,037
December	79,469	21,367	34,530	9,337
Jan.-Dec.	940,083	294,826	357,394	104,363
1988:				
January	74,629	24,055	26,050	8,973
February	75,240	24,470	26,412	8,649
March	81,978	27,153	28,412	7,712
April	78,725	26,516	28,209	9,487
May	88,484	29,635	33,072	10,226
June	93,003	30,076	37,251	9,034
July	80,170	25,572	30,347	7,903
August	90,302	30,412	31,675	9,178
September	79,125	27,888	30,565	7,327
October	79,071	27,803	30,198	7,589
November	80,261	28,622	31,507	8,455
December	75,407	26,566	34,113	8,198
Jan.-Dec.	976,395	328,768	367,811	102,731
Jan.-Dec. Pct. Chg. Yr-on-Yr	+3.9	+11.5	+2.9	-1.6
1989:				
January	79,780	28,584	29,255	10,208
February	69,829	26,991	25,612	9,392
March	69,998	31,581	25,136	7,764

1/ Includes ingredients added. All expressed in liquid egg equivalent. 2/ Liquid egg products produced for immediate consumption.

Egg Exports

U.S. egg exports for January through February 1989 decreased to 16.6 million dozen equivalent, 28 percent below the same period a year earlier. Exports to Japan were unchanged, at 8.5 million dozen equivalent, practically all as egg products, Japan took slightly over 80 percent of the U.S. egg product exports. Total egg product exports were down 8 percent. Hatching egg exports slipped about 6 percent, but rose 150 percent to Iraq, under a Commodity Credit Corporation (CCC) export credit guarantee. Iraq and Canada accounted for 60 percent of hatching egg exports. Table egg exports were down sharply, with Hong Kong taking slightly over 50 percent. Sales to Hong Kong were assisted by the EEP. The decline in table egg exports was mainly due to sharp drops in EEP sales to Iraq and the United Arab Emirates. The average export unit value for table egg exports rose 28 percent to 73 cents per dozen compared with a year earlier.

Table 24--U.S. egg exports to major importers, January-February, 1988-1989 1/

Country or area	1988	1989
	1,000 dozen	
Japan	8,557	8,542
Hong Kong	2,127	1,552
Iraq	4,790	1,227
Canada	1,870	1,131
Mexico	677	953
Jamaica	400	556
Haiti	120	420
United Kingdom	228	338
Israel	28	267
Federal Rep of Germany	280	197
Other	4,169	1,452
Grand Total	23,246	16,635

1/ Shell, and shell equivalent of egg products.

Egg Imports

Information on egg imports will be significantly impacted by changes in the U.S. trade reporting codes and commodity descriptions. These changes were made to bring the codes into accordance with the International Harmonized System. Effective January 1, 1989, chicken eggs are no longer reported separately from other birds' eggs, but are included as part of total shell egg imports. Previously, chicken eggs were differentiated from other shell egg imports. In 1988, 45 percent of all birds' shell egg imports were chicken eggs. The balance included duck and turkey eggs as well as non-poultry eggs. The proportion of chicken eggs varies considerably from year to year. Since 1982 chicken egg imports as a share of all shell egg imports have been 68, 95, 86, 76, 72, 41, and 45 percent, respectively.

Livestock and Red Meat

Cattle

Pasture and Range Prospects Uncertain

Drought conditions have shifted from the Pacific Northwest and Northern Great Plains in 1988 to the Central Great Plains in early spring 1989. Pasture and range conditions on May 1 were 68, down from 73 a year ago and from the 1978-87 average of 79. Conditions worsened from a year earlier in 24 States, and improved in 22 States. Kansas suffered the largest year-to-year declines, dropping 37 points to 47. Conditions improved in Montana and the Pacific Northwest. Conditions dropped sharply from a year earlier in Colorado, Iowa, Nebraska, New Mexico, and Wyoming; and remained in the very poor to severe drought range in North Dakota, South Dakota, and Wisconsin.

Table 25--Hay acreage, production, and stocks

Item	1987	1988	1989	1989 1988
	-----1,000 acres-----			Percent
Acreage	60,748	65,559	63,061	96
	1,000 tons			
Production	149,302	126,817		
Stocks on farms				
May 1	32,418	27,353	17,627	64
December 1	119,845	90,887		

Hay stocks on May 1 were the lowest since 1965, and down 36 percent from a year ago. While moisture conditions are improving in some areas, they have declined dramatically from a year ago in others. Many areas which were dry a year ago need continued timely rains to improve forage prospects because subsoil moisture levels remain low. Producers indicated intentions to harvest 63.1 million acres of hay this year, 4 percent fewer than last year, but 4 percent more than 2 years ago. Acreage in 1988 was increased due partially to more marginal acreage being harvested during the drought, particularly on the long term Conservation Reserve acreage. Hay and grazing was allowed during the 5-month restricted period on Conservation Use (CU) and Acreage Conservation Reserve (ACR) acreage in drought declared areas. Parts of Kansas, Nebraska, Missouri, Iowa, Texas, New Mexico, and California have been opened to hay and graze ACR and CU acreage due to drought this year. No decision has been made on possible use of the Conservation Reserve acreage this year. The farm price of hay in April averaged \$104 a ton, up from \$98.10 in March and \$71.40 a year earlier. Improved moisture, and thus forage conditions, will be a key factor in the beef outlook for the second half of the year.

Fed Cattle Marketings To Rise

Cattle slaughter and beef production began increasing seasonally during April, after first-quarter production fell to the lowest levels for this period since 1983. Larger feedlot marketings have accounted for most of the rise, pressuring slaughter cattle prices back to the mid-\$70's, \$4 to \$5 below the record highs reported in March.

The decline in first quarter cattle slaughter was primarily due to a 4-percent drop in fed cattle marketings. Steer slaughter fell 7 percent from a year earlier, and heifer slaughter slipped nearly 4 percent. Nonfed steer and heifer slaughter, at the lowest levels on record, was down 48 percent, and accounted for less than 2 percent of total slaughter. Cow slaughter rose 1 percent from a year earlier, with dairy and beef cow slaughter up 8 percent and down 5 percent, respectively.

Smaller first-quarter feedlot marketings had been projected, based on lower feedlot inventories reported on January 1. However, marketings fell below intentions, reaching only 5.6 million head. This was the smallest 13-State marketing figure since 1982, and nearly 4 percent below a year earlier.

The lower marketings occurred despite record numbers of heavyweight cattle on feed January 1. In this case, however, there was a sizable gap between the heaviest and lightest cattle weight groups, which allowed feedlots to market cattle when they were ready and stay current going into the spring quarter.

Table 26--Commercial cattle slaughter 1/ and production

Year	Steers and heifers			Cows	Bulls and stags	Total	Dressed weight	Commercial production
	Fed	Nonfed	Total					
-----1,000 head-----							Pounds	Million pounds
1986								
I	6,509	325	6,834	1,885	165	8,884	649	5,769
II	6,702	683	7,385	2,006	181	9,572	653	6,246
III	6,780	740	7,520	1,941	191	9,652	651	6,273
IV	6,126	748	6,874	2,129	177	9,180	645	5,925
Year	26,117	2,496	28,613	7,961	714	37,288	649	24,213
1987								
I	6,511	439	6,950	1,652	163	8,765	656	5,754
II	6,477	619	7,096	1,603	179	8,878	646	5,737
III	6,945	461	7,406	1,636	181	9,223	657	6,064
IV	6,353	543	6,896	1,719	166	8,781	666	5,850
Year	26,286	2,062	28,348	6,610	689	35,647	657	23,405
1988								
I	6,591	309	6,900	1,529	152	8,581	664	5,700
II	6,757	334	7,091	1,504	164	8,759	660	5,784
III	7,109	349	7,458	1,575	167	9,200	672	6,185
IV	6,218	431	6,649	1,729	161	8,539	674	5,755
Year	26,675	1,423	28,098	6,337	644	35,079	668	23,424
1989								
I	6,325	162	6,487	1,550	143	8,180	676	5,529

1/ Classes estimated.

Table 27--Federally inspected cattle slaughter

Week ended	Cattle			Steers			Total			Cows			Dairy/total		
	1987	1988	1989	1987	1988	1989	1987	1988	1989	1987	1988	1989	1987	1988	1989
-----Thousands-----										-----Percent-----					
Jan. 7	741	664	543	349	328	256	148	131	119	66	64	64	45	49	54
14	766	723	627	360	359	290	151	126	131	67	62	68	44	49	52
21	707	703	654	336	353	313	124	126	129	61	60	65	49	48	50
28	673	675	640	332	340	310	128	119	124	64	57	62	50	48	50
Feb. 4	674	646	624	316	335	300	135	116	113	67	58	60	50	50	53
11	621	639	605	303	332	300	119	106	103	59	55	56	50	52	55
18	602	637	644	292	316	319	109	118	119	55	59	64	50	50	54
25	657	640	628	326	314	309	121	121	108	65	60	62	54	49	57
Mar. 4	678	616	639	337	304	316	127	114	114	67	56	62	53	49	54
11	646	609	600	311	298	312	124	105	104	58	54	57	47	52	55
18	624	622	588	300	307	288	111	106	119	55	54	61	49	51	51
27	616	607	584	303	304	286	116	108	114	58	53	57	50	49	49
Apr. 1	652	617	587	328	316	286	121	106	111	57	51	57	47	48	51
8	649	600	609	333	310	300	114	101	118	51	50	57	45	50	48
15	681	619	646	349	315	335	119	110	117	52	54	56	44	49	48
22	639	670	663	330	349	332	117	108	122	48	50	56	41	46	46
29	635	674	652	321	356	332	118	109	122	48	50	54	41	46	44
May 6	631	664		309	358		116	104		46	46		40	44	
13	700	664		348	344		124	109		50	47		37	43	
20	695	682		355	348		131	118		49	48		37	41	
27	613	689		308	355		107	125		43	52		40	42	
June 3	680	575		351	298		117	96		50	39		43	41	
10	669	681		340	336		115	120		49	50		43	42	
17	649	678		320	338		123	129		49	53		40	41	
24	680	678		339	344		129	120		52	50		40	42	
July 1	621	682		316	348		109	119		47	50		43	42	
8	652	609		338	306		114	108		51	51		45	48	
15	682	724		339	341		128	135		53	62		41	46	
22	672	691		333	359		121	116		51	55		42	47	
29	676	694		339	346		123	112		56	57		46	51	
Aug. 5	694	678		335	339		123	111		58	54		47	49	
12	713	694		354	346		124	112		58	56		47	50	
19	692	688		336	337		129	115		63	54		49	47	
26	706	678		341	328		132	121		66	58		50	48	
Sept 2	690	703		324	326		119	116		54	55		45	47	
9	624	614		293	288		100	101		44	49		44	49	
16	729	692		337	333		122	124		53	58		43	47	
23	677	672		312	332		123	119		57	58		46	49	
30	684	667		324	316		116	118		53	58		46	49	
Oct. 7	690	674		340	309		120	125		53	56		44	46	
14	696	680		338	311		128	127		55	56		43	44	
21	676	673		319	312		136	132		57	58		42	44	
28	663	676		315	310		140	143		59	64		44	45	
Nov. 4	649	656		311	304		140	140		59	62		41	44	
11	643	621		301	298		135	134		56	62		41	46	
18	648	623		308	286		141	140		57	63		40	45	
25	576	546		280	260		109	110		46	51		42	46	
Dec. 2	646	648		305	298		139	145		58	67		42	46	
9	660	624		311	300		140	140		60	66		43	47	
16	638	623		324	306		114	126		51	62		45	50	
23	482	622		242	305		80	116		39	58		49	50	
30	561	549		291	281		86	90		41	46		48	51	

1/ Corresponding dates to 1989: 1987, Jan. 10; 1988, Jan. 9.

Table 28--Cattle on feed, placements, and marketings, 13 States

Item	1987	1988	1989	1989/88
	1,000 head			Percent change
On feed Jan 1	9,245	9,769	9,408	-4
Placements, Jan.-Mar.	5,680	5,824	6,212	+7
Marketings, Jan.-Mar.	5,747	5,823	5,598	-4
Other disappearance Jan.-Mar.	371	385	344	-11
On feed April 1	8,807	9,385	9,678	+3
Steer & steer calves	5,708	6,100	6,191	+1
-500 lb	140	176	151	-14
500-699 lb	822	644	735	+14
700-899 lb	2,417	2,516	2,455	-2
900-1,099 lb	1,790	2,094	2,270	+8
1,100 + lb	539	670	580	-13
Heifers & heifer calves	3,064	3,251	3,448	+6
-500 lb	97	87	62	-29
500-699 lb	818	756	701	-7
700-899 lb	1,390	1,543	1,746	+13
900 + lb	759	865	939	+9
Cows	35	34	39	+15
Marketings, Apr.-June	5,619	5,859	6,088 1/	+4

1/ Intentions.

Winter Placements Record Large

Smaller feedlot marketings during the winter quarter did not seem to impact feedlot demand for additional placement cattle, however. Net placements surged to a record 5.86 million head, 700,000 head above the previous 5-year average and 8 percent above a year ago, due to the early movement off wheat and winter pastures necessitated by dry conditions. Thus, April 1 cattle on feed inventories reached 9.7 million head, 3 percent above last year's relatively high number and nearly 450,000 head above the previous 5-year average.

Most of the year-over-year increase in April 1 feedlot inventories came from higher heifer placements. The number of heifers on feed April 1 was 6 percent above last spring with heifers weighing 700-900 pounds, up 13 percent from the previous year. Whether these heifers eventually were headed for feedlots and were pulled off grass early, or were being held back for breeding herds and were forced off pastures by the drought, is unclear; this increase suggests a more modest rate of heifer retention this year.

Table 29--7-States cattle on feed, placements, and marketings

Year	On feed	Percent change 1/	Net placements	Percent change 1/	Marketings	Percent change 1/	Other disappearance	Percent change 1/
	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent
1987								
Jan.	7,643	-3.5	1,464	-2.0	1,803	+3.0	127	+46.0
Feb.	7,304	-4.7	1,337	+18.5	1,478	+5	105	+14.1
Mar.	7,163	-2.2	1,630	+4.2	1,561	-2.0	89	+3.5
Apr.	7,232	-.8	1,542	+6.7	1,541	-5.5	139	15.8
May	7,233	+1.8	1,841	+13.4	1,514	-7.4	143	+8.3
June	7,560	+6.5	1,335	+21.9	1,702	+3.3	87	+29.9
July	7,193	+9.9	1,203	-18.7	1,703	+7	71	+10.9
Aug.	6,693	+5.7	1,847	+6.6	1,722	+3.8	68	-2.9
Sept.	6,818	+6.5	2,358	+15.4	1,641	-.2	71	+20.3
Oct.	7,535	+10.6	2,529	+8.9	1,700	+7.1	85	+4.9
Nov.	8,364	+10.8	1,526	-11.6	1,478	+2.1	103	+18.4
Dec.	8,412	+7.5	1,221	-8.3	1,567	+3.5	119	+14.4
1988								
Jan.	8,066	+5.5	1,557	+6.4	1,754	-2.7	106	-16.5
Feb.	7,869	+7.7	1,253	-6.3	1,535	+3.9	126	+20.0
Mar.	7,587	+5.9	1,742	+6.9	1,583	+1.4	106	+19.1
Apr.	7,746	+7.1	1,382	-10.4	1,609	+4.4	139	0
May	7,519	+4.0	2,024	+9.9	1,724	+13.9	141	-1.4
June	7,819	+3.4	1,309	-1.9	1,697	-.3	68	-21.8
July	7,431	+3.3	1,184	-1.6	1,760	+3.3	62	-12.7
Aug.	6,855	+2.4	1,594	-13.7	1,760	+2.2	66	-2.9
Sept.	6,689	-1.9	2,102	-10.9	1,647	+.4	67	-5.6
Oct.	7,144	-5.2	2,391	-5.5	1,601	-5.8	84	-1.2
Nov.	7,934	-5.1	1,573	+3.1	1,507	+2.0	107	+3.9
Dec.	8,000	-4.9	1,286	+5.3	1,521	-2.9	115	-3.4
1989								
Jan.	7,765	-3.7	1,607	+3.2	1,672	-4.7	104	-1.9
Feb.	7,700	-2.1	1,470	+17.3	1,509	-1.7	115	-8.7
Mar.	7,661	+1.0	1,900	+9.1	1,549	-2.1	75	-29.2
Apr.	8,012	+3.4	1,405	+1.7	1,570	-2.4	129	-7.2
May	7,847	+4.4						

1/ Percent change is from previous year.

Second-Quarter Marketings Record Large

Cattle inventories on feed April 1 were pretty evenly spread between the weight groups, and dressed steer weights recently showed a significant decline, falling from an average of 750 pounds in January to 720 pounds in mid-April. This suggests that feedlots are moving cattle on schedule, and may even indicate that some cattle are being pulled forward.

In the April 1 Cattle on Feed report, producers indicated that they would market a record 6.1 million head during the spring quarter, nearly 9 percent above the winter quarter and 4 percent above a year ago. The higher marketings will translate into a significant jump in weekly cattle slaughter that could average nearly 700,000 head per week for the spring quarter. Cattle slaughter already has begun to increase, with daily averages between 125,000 and 128,000 head and weekly slaughter above 650,000 head.

An additional \$3- to \$4-decline from the \$75 mid-May average in fed steer prices seems likely by the end of June if the higher slaughter levels materialize. Dressed cattle

weights have declined by as much as 20 to 30 pounds over the past month, which will help soften the impact of higher slaughter. Still, second quarter beef production likely will exceed 6 billion pounds, a sizable increase from both first quarter 1989 and year-earlier levels.

Recent feedlot losses, exceeding \$20 per head, are expected to weaken the demand for feeder cattle this spring. Falling prices for heavy stocker cattle, which recently fell \$10 per cwt to the low \$70's, reflect some of this weakness. The price decline is from an inflated level, however, and does make them more attractive for feedlot placement. In fact, profit prospects for cattle placed during the spring quarter and sold in late summer have improved. Estimated feedlot breakevens for August-September marketings are in the upper \$60's per cwt. These breakevens may be fairly attractive to cattle feeders facing both tighter cattle supplies during the second half of the year and expectations for prices to begin moving contraseasonally higher by the fourth quarter.

Table 30--13--States cattle on feed, placements, marketings, and other disappearance

Year	On feed 1/ 1,000 head	Percent change 2/ Percent	Place- ments 1,000 head	Percent change 2/ Percent	Fed mar- ketings 1,000 head	Percent change 2/ Percent	Other dis- appearance 1,000 head	Percent change 2/ Percent
1985								
I	10,653	7.3	5,315	-3.4	5,907	3.4	373	2.2
II	9,688	3.7	5,206	-6.5	5,787	3.0	437	-24.9
III	8,670	-3	5,480	-12.3	5,969	5.0	244	-9.0
IV	7,937	-11.8	7,365	-3.0	5,224	-5.1	324	-22.3
Year	---	---	23,366	-6.1	22,887	1.6	1,378	-15.6
1986								
I	9,754	-8.4	5,270	-.8	5,763	-2.4	316	-15.3
II	8,945	-7.7	5,221	+.3	5,821	+.6	375	-14.2
III	7,970	-8.1	6,336	15.6	5,876	-1.6	233	-4.5
IV	8,197	3.3	6,756	-8.3	5,396	3.3	312	-3.7
Year	---	---	23,583	.9	22,856	-.1	1,236	-10.3
1987								
I	9,245	-5.1	5,680	7.8	5,747	-.3	371	17.4
II	8,807	-1.5	5,906	13.1	5,619	-3.5	428	14.1
III	8,666	+8.7	6,590	4.0	6,022	2.5	242	3.9
IV	8,992	9.7	6,718	-.6	5,603	3.8	338	8.3
Year	---	---	24,894	5.6	22,991	.6	1,379	11.6
1988								
I	9,769	5.7	5,824	2.5	5,823	1.3	385	3.8
II	9,385	6.6	5,893	-.2	5,859	4.3	418	-2.3
III	9,001	3.9	5,986	-9.2	6,171	2.5	225	-7.0
IV	8,591	-4.5	6,650	-1.0	5,486	-2.1	347	2.7
Year	---	---	24,353	-2.2	23,339	1.5	1,375	-.3
1989								
I	9,408	-3.7	6,212	+6.7	5,598	-3.9	344	-10.6
II	9,678	+3.1			6,088 3/	+3.9		

1/ Beginning of quarter. 2/ Percent change from previous year. 3/ Expected marketings.

Table 31--Great Plains custom cattle feeding: Selected costs at current rates 1/

Purchased during 1988 Marketed during 1988-89	May Nov.	June Dec.	July Jan.	Aug. Feb.	Sept. Mar.	Oct. Apr.	Nov. May	Dec. June	Jan. July	Feb. Aug.	Mar. Sept.	Apr. Oct.
Expenses: (\$/head)												
600 lb. feeder steer	487.50	455.70	466.02	492.00	494.28	493.14	490.20	496.98	518.28	513.00	496.20	477.00
Transportation to feedlot (300 miles)	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96
Commission	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Feed												
Milo (1500 lb) 2/	55.65	77.85	79.20	76.50	77.10	76.50	72.15	71.40	74.70	72.75	73.05	72.00
Corn (1500 lb) 2/	66.90	87.90	89.70	84.15	85.05	84.15	80.85	82.05	83.10	80.70	81.15	79.95
Cotton seed meal (400 lb)	48.80	48.80	57.60	57.60	57.60	53.60	53.60	53.60	56.00	56.00	56.00	56.00
Alfalfa hay (800 lb.)	51.20	49.20	48.40	47.60	50.80	50.80	52.00	51.60	53.20	54.00	49.20	57.60
Total feed cost	222.55	263.75	274.90	265.85	270.55	265.05	258.60	258.65	267.00	263.45	259.40	265.55
Feed handling and management charge	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
Vet medicine	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Interest on feeder and 1/2 feed	31.44	30.85	33.95	35.15	35.41	38.32	37.94	38.36	42.37	41.91	40.68	41.16
Death loss (1.5% of purchase)	7.31	6.84	6.99	7.38	7.41	7.40	7.35	7.45	7.77	7.69	7.44	7.15
Marketing 3/	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.
Total	779.76	788.09	812.82	831.34	838.62	834.87	825.06	832.41	866.38	857.01	834.69	821.82
Selling price required to cover: 4/ \$/cwt.												
Feed and feeder cost (1056 lb.)	67.24	68.13	70.16	71.77	72.43	71.80	70.91	71.56	74.36	73.53	71.55	70.32
All costs	73.84	74.63	76.97	78.73	79.41	79.06	78.13	78.83	82.04	81.16	79.04	77.82
Selling price 5/	73.52	73.64	74.40	75.40	78.87	77.51						
Net margin	-.32	-.99	-2.57	-3.33	-.54	-1.55						
Cost per 100 lb. gain:												
Variable cost												
less interest \$/cwt.	48.85	57.48	61.18	59.45	60.39	59.29	57.99	58.02	59.75	59.03	58.17	59.34
Feed costs \$/cwt.	42.59	51.31	54.98	53.17	54.11	53.01	51.72	51.73	53.40	52.69	51.88	53.11
Prices: (\$/cwt)												
Choice feeder steer 600-700 lb. Amarillo	81.25	75.95	77.67	82.00	82.38	82.19	81.70	82.83	86.38	85.50	82.70	79.50
Transportation rate \$/cwt/100 miles 6/	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22
Commission fee \$/cwt.	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50
Milo \$/cwt.	3.56	5.04	5.13	4.95	4.99	4.95	4.66	4.61	4.83	4.70	4.72	4.65
Corn \$/cwt.	4.31	5.71	5.83	5.46	5.52	5.46	5.24	5.32	5.39	5.23	5.26	5.18
Cottonseed Meal (41%) \$/cwt. 7/	12.20	12.20	14.40	14.40	14.40	13.40	13.40	13.40	14.00	14.00	14.00	14.00
Alfalfa hay \$/ton 8/	94.00	100.00	99.00	89.00	97.00	97.00	100.00	99.00	103.00	105.00	93.00	114.00
Feed handling and management \$/ton	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Interest, annual rate 9/	10.50	10.50	11.25	11.25	11.25	12.25	12.25	12.25	13.00	13.00	13.00	13.50

1/ Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with experience of individual feedlots. For individual use, adjust expenses and prices for management, production level, and locality of operation. Steers are assumed to gain 500 lb in 180 days at 2.8 lb per day with feed conversion of 8.4 lb per pound gain. 2/ Texas Panhandle elevator price plus \$0.15/cwt handling and transportation to feedlots. 3/ Most cattle sold f.o.b. at the feedlot with 4-percent shrink. 4/ Sale weight 1,056 lb (1,100 lb less 4-percent shrink). 5/ Choice slaughter steers, 900-1100 lb, Texas-New Mexico direct. 6/ Converted from cents per mile for a 44,000-lb haul. 7/ Average prices paid by farmers in Texas. 8/ Average price received by farmers in Texas plus \$30/ton handling and transportation to feedlots. 9/ Prime rate plus 2 points.

Table 32--Corn Belt cattle feeding: Selected costs at current rates 1/

Purchased during 1988-89 Marketed during 1988-89	May Nov.	June Dec.	July Jan.	Aug. Feb.	Sept. Mar.	Oct. Apr.	Nov. May	Dec. June	Jan. July	Feb. Aug.	Mar. Sept.	Apr. Oct.
Expenses: (\$/head)												
600 lb. feeder steer	497.28	464.28	474.48	507.90	504.00	514.86	503.40	516.78	516.00	513.36	506.70	495.78
Transportation to feedlot-400 miles	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28
Corn (45 bu.)	87.30	108.45	122.40	117.90	116.10	114.30	90.00	112.50	115.20	116.10	117.00	113.40
Silage (1.7 tons)	31.64	36.56	47.24	49.76	49.00	47.12	41.96	47.20	48.55	50.26	50.99	50.03
Protein supplement (270 lb.)	35.91	35.91	44.28	44.28	44.28	41.85	41.85	41.85	41.85	41.85	41.85	41.85
Hay (400 lb.)	10.80	11.40	17.20	19.60	19.30	18.20	17.80	18.50	19.10	20.20	20.60	20.40
Total feed costs	165.65	192.77	231.12	231.54	228.68	221.47	191.61	220.05	224.70	228.41	230.44	223.12
Labor (4 hrs.)	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72
Management (1 hr.) 2/	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86
Vet medicine 3/	5.44	5.44	5.56	5.56	5.56	5.61	5.61	5.61	5.67	5.67	5.67	5.73
Interest on purchase (6 months)	27.40	25.58	26.50	28.37	28.15	29.91	29.25	30.02	30.73	30.57	30.17	30.91
Power, equip., fuel, shelter, deprec. 3/	25.38	25.38	25.91	25.91	25.91	26.15	26.15	26.15	26.46	26.46	26.46	26.74
Death loss (1% of purchase)	4.97	4.64	4.74	5.08	5.04	5.15	5.03	5.17	5.16	5.13	5.07	4.96
Transportation (100 miles)	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31
Marketing expenses	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35
Miscellaneous and indirect costs 3/	10.98	10.98	11.21	11.21	11.21	11.31	11.31	11.31	11.44	11.44	11.44	11.44
Total	771.62	763.60	814.04	850.07	843.06	848.97	806.88	849.61	854.68	855.57	850.48	833.33
Selling price required to cover: (\$/cwt.)												
Feed and feeder cost (1050 lb.)	63.14	62.58	67.20	70.42	69.78	70.13	66.19	70.17	70.54	70.64	70.20	68.47
All costs (1050 lb.)	73.49	72.72	77.53	80.96	80.29	80.85	76.85	80.91	81.40	81.48	81.00	79.36
Feed cost per 100 lb. gain (450 lb.)	36.81	42.84	51.36	51.45	50.82	49.21	42.58	48.90	49.93	50.76	51.21	49.58
Choice steers, Omaha (1000-1100 lb.)	70.07	71.21	72.35	72.92	75.75	75.31						
Net margin	-3.42	-1.51	-5.18	-8.04	-4.54	-5.54						
Prices:												
Feeder steer, Choice (600-700 lb.)												
Kansas City \$/cwt.	82.88	77.38	79.08	84.65	84.00	85.81	83.90	86.13	86.00	85.56	84.45	82.63
Corn \$/bu. 4/	1.94	2.42	2.72	2.62	2.58	2.54	2.00	2.50	2.56	2.58	2.60	2.52
Hay \$/ton 4/	54.00	57.00	86.00	98.00	96.50	91.00	89.00	92.50	95.50	101.00	103.00	102.00
Corn silage \$/ton 5/	18.61	21.51	27.79	29.27	28.82	27.72	24.69	27.76	28.56	29.57	30.00	29.43
Protein supplement (32-36%) \$/cwt. 6/	13.30	13.30	16.40	16.40	16.40	15.50	15.50	15.50	15.50	15.50	15.50	14.55
Farm labor \$/hour	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93
Interest rate, annual	11.02	11.02	11.17	11.17	11.17	11.62	11.62	11.62	11.91	11.91	11.91	12.47
Transportation rate \$/cwt. per 100 mile 7	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22
Mktg. expenses \$/cwt.	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35
Index of prices paid by farmers (1910-14=100)	1158	1158	1182	1182	1182	1193	1193	1193	1207	1207	1207	1220

1/ Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with experience of individuals for management, production, and locality of operation. 2/ Assumes 1 hour at twice the labor rate. 3/ Adjusted quarterly by the index of prices paid by farmers for commodities, services, interest, taxes, and wage rates. 4/ Average price received by farmers in IA and IL. 5/ Price derived from an equivalent price of 5 bushels corn and 330 lb. hay. 6/ Average price paid by farmers in IA and IL. 7/ Converted from cents/mile for a 44,000-lb. haul. 8/ Yardage plus commission fees at a Midwest terminal market.

Table 33--April 1 feeder cattle supply

Item	1986	1987	1988	1989	1989/ 1988
-----1,000 head-----					Percent change
Calves - 500 lb					
On farms Jan 1.	24,431	23,154	21,070	20,248	-3.9
Slaughter Jan-Mar.	873	760	647	583	-9.9
On feed April 1 1/	252	281	310	253	-18.4
Total	23,306	22,113	20,113	19,412	-3.5
Steers & Heifers					
500 lb + 2/					
On farms Jan 1.	24,057	22,865	23,537	23,425	-.5
Slaughter Jan-Mar.	6,834	6,950	6,899	6,487	-6.0
On feed April 1 1/	10,241	10,121	10,723	11,181	4.3
Total	6,982	5,794	5,915	5,757	-2.7
Total supply	30,288	27,907	26,028	25,169	-3.3

1/ Estimated U.S. steers and heifers. 2/ Not including heifers for cow replacements.

Feeder Cattle Supplies Continue To Decline

Feeder cattle supplies outside feedlots on April 1 were the lowest since this series began in the early 1960's, falling 3 percent below a year earlier. The decline in numbers was equally split between calves and yearlings, suggesting tight cattle supplies will become even tighter if current feedlot demand does not weaken as much as projected. Future demand for placement weight feeder cattle likely will keep lighter cattle trading in the low \$80's throughout the summer quarter and at about a \$10-premium to heavier cattle. Some seasonal weakness in feeder cattle prices can be expected in late summer as pasture conditions decline seasonally, but 700-800 pound cattle next fall still should command prices in the low to mid-\$70's.

Second-Half Prospects Remain Positive

It seems that industry expectations already have become more bearish, which may not be entirely justified. The current focus on how fast cattle prices will drop tends to ignore the potential for a strong second half showing.

Evolving forage conditions, combined with the number of heifers retained for the breeding herd this spring and early summer, provide the key to late summer and fall fed cattle marketings. A modest increase in heifer retention is still expected and, together with already reduced numbers of feeder cattle, should decrease fed cattle marketings below year-earlier levels in mid-summer through fall. Consequently, beef production this summer and fall should decline about 4 percent from a year earlier. Prices for choice steers at Omaha averaged \$75.29 per cwt in April, and may average \$73 to \$74 this spring. Prices should bottom out in early summer, possibly dropping near to slightly below \$70 as fed cattle supplies rise. However, summer prices may average \$69 to \$73, with prices rising in late summer and averaging \$69 to \$72 for the fourth quarter.

Table 34--Commercial calf slaughter and production

Year	Slaughter	Dressed weight	Production
	1,000 head	Pounds	Million pounds
1986			
I	873	148	129
II	836	154	129
III	859	150	129
IV	839	145	122
Year	3,408	149	509
1987			
I	760	147	112
II	651	155	101
III	684	145	99
IV	720	144	104
Year	2,815	148	416
1988			
I	647	150	97
II	567	162	92
III	665	149	99
IV	627	158	99
Year	2,506	154	387
1989			
I	583	156	91

Table 35--Calf slaughter by class under Federal inspection

Year	Bob veal 150 lb. & below	Fed, 150-400 lb.		Other over 400 lb.	Total
		Formula	Non- formula		
-----1,000 head-----					
1986	1,618.6	1,009.3	285.9	281.0	3,194.8
1987					
Jan.	115.9	87.1	15.1	29.5	247.6
Feb.	104.5	82.2	13.3	24.7	224.7
Mar.	120.5	90.2	13.8	26.6	251.1
Apr.	89.4	86.8	15.5	23.2	214.9
May	70.0	80.7	14.4	24.0	189.1
Jun.	81.3	94.2	13.3	25.7	214.5
Jul.	101.3	80.8	12.1	26.0	220.2
Aug.	101.6	64.2	14.8	21.8	202.4
Sept.	99.4	91.0	14.0	24.2	228.6
Oct.	102.8	85.6	19.3	25.4	233.1
Nov.	103.5	70.4	12.3	25.1	211.3
Dec.	117.6	89.5	13.5	21.3	241.9
Year	1,207.8	1,002.7	171.4	297.5	2,679.4
1988					
Jan.	92.5	82.0	12.5	18.1	205.1
Feb.	86.5	84.9	16.2	15.2	202.8
Mar.	96.3	92.8	11.4	15.3	215.8
Apr.	65.3	78.7	10.8	14.3	169.1
May	58.1	80.7	17.1	15.4	171.3
Jun.	82.1	90.4	14.2	17.1	203.8
July	106.3	74.2	14.1	12.4	207.0
Aug.	111.7	86.3	12.2	16.7	226.9
Sept.	92.7	85.0	13.1	16.5	207.3
Oct.	84.6	84.7	11.9	15.8	197.0
Nov.	94.7	81.4	11.3	14.1	201.5
Dec.	95.1	82.2	11.1	14.2	202.6
Year	1,065.9	1,003.3	155.9	185.1	2,410.2
1989					
Jan.	83.4	83.6	10.3	18.3	195.6
Feb.	75.7	76.6	7.7	15.3	175.3
Mar.					

Consumer resistance to rising retail beef prices has not been noticeable this spring, and beef cutout values held steady at \$117 to \$119 per cwt through mid-May. Retail beef prices likely will not begin to reflect the recent decline in live and wholesale markets till later this spring, although the farm-to-retail spread had already widened contraseasonally. If feedlot marketings remain current during the next 2 to 3 months, stronger live cattle prices and modest declines at the retail counter could support higher profits throughout the industry by the middle of the summer quarter.

Table 36--Beef, Choice Yield Grade 3: Retail, carcass, and farm values, spreads, and farmers' share

Year	Cents per pound							Percent			
	Retail price 1/	Gross carcass value 2/	By-product allowance 3/	Net carcass value 4/	Gross farm value 5/	By-product allowance 6/	Net farm value 7/	Total	Carcass-retail	Farm-carcass	Farmers' share 8/
1982	242.5	152.8	2.1	150.7	155.5	15.0	140.5	102.0	91.8	10.2	58
1983	238.1	147.4	2.0	145.4	151.8	15.6	136.2	101.9	92.7	9.2	57
1984	239.6	150.6	3.0	147.6	158.6	18.6	140.0	99.6	92.0	7.6	58
1985	232.6	137.0	1.8	135.2	142.2	15.4	126.8	105.8	97.4	8.4	55
1986	230.7	134.3	1.2	133.1	140.0	15.6	124.4	106.3	97.6	8.7	54
1987	242.5	146.7	1.4	145.3	157.6	19.7	137.9	104.6	97.2	7.4	57
I	234.6	138.4	1.4	137.0	147.9	17.6	130.3	104.3	97.6	6.7	56
II	243.2	157.6	1.5	156.1	167.8	20.0	147.8	95.4	87.1	8.3	61
III	246.4	146.9	1.4	145.5	157.8	20.1	137.7	108.7	100.9	7.8	56
IV	245.9	144.2	1.5	142.7	156.9	21.0	135.9	110.0	103.2	6.8	55
1988											
I	245.9	150.7	1.7	149.0	166.0	23.2	142.8	103.1	96.9	6.2	58
II	254.4	162.2	1.8	160.4	176.2	23.2	153.0	101.4	94.0	7.3	60
III	258.9	151.3	1.7	149.6	163.9	21.6	142.2	116.7	109.3	7.4	55
IV	259.4	158.2	1.7	156.5	171.4	20.0	151.4	108.0	102.9	5.1	58
Year	254.7	155.6	1.7	153.9	169.4	22.0	147.4	107.3	100.8	6.5	58
1989											
Jan.	264.3	161.5	1.7	159.8	175.4	19.6	155.8	108.5	104.5	4.0	59
Feb.	265.2	162.5	1.6	160.9	177.7	20.1	157.6	107.6	104.3	3.3	59
Mar.	269.5	169.0	1.6	167.4	185.6	21.7	163.9	105.6	102.1	3.5	61
I	266.3	164.3	1.6	162.7	179.6	20.5	159.1	107.2	103.6	3.6	60

1/ Estimated weighted-average of BLS prices of retail cuts from Choice Yield Grade 3 carcass. 2/ Value of carcass-quantity equivalent to 1 lb of retail cuts. A wholesale-carcass equivalent of 1.476 is used. 3/ Portion of gross carcass value attributed to fat and bone trim. 4/ Gross carcass value minus carcass byproduct allowance. 5/ Market value to producer for 2.4 lb of live animal, equivalent to 1 lb of retail cuts. 6/ Portion of gross farm value attributed to edible and inedible byproducts. 7/ Gross farm value minus farm byproduct allowance. 8/ Percent net farm value is of retail price.

U.S. Beef Trade

U.S. Cattle Imports Lower

Live cattle imports into the United States reached 1.3 million head last year, but are forecast to decline to about 1 million head in 1989. Imports of cattle into the United States during January-February 1989 were down 42 percent from 1988's level. Imports from Mexico, which accounted for about two-thirds of the total last year, will likely be lower in 1989 because of the 20-percent export tariff Mexico is collecting on all exported feeder cattle. The Mexican Government briefly halted cattle exports at the beginning of April 1989, but allowed them to resume by mid-April.

Imports of cattle from Canada kept climbing during the first 2 months of 1989. However, this situation is not expected to continue throughout the year. A new slaughter facility south of Calgary is due to come on line in June, and many of the cattle that would have been shipped to the United States will probably be processed through this plant instead.

In 1988 the United States imported 487,518 cattle from Canada, up 86 percent. Close to 90 percent were slaughter cattle. According to Canadian statistics on slaughter cattle exports to the United States, steers accounted for 38 percent of the total; heifers, 22 percent; cows, 33 percent; and bulls, 7 percent. For the first 4 months of 1989, Canada reported slaughter steer exports to the United States up 16 percent. The largest increase was in cow slaughter, up 92 percent, while steers were down 28 percent. Exports of heifers and bulls were about even with last year.

Table 37--Imports of feeder cattle and calves and hogs from Canada and Mexico

Year	Feeder cattle and calves		Hogs
	Canada	Mexico	Canada
-----Number-----			
1986			
Oct.	9,404	11,957	32,937
Nov.	13,938	203,827	21,013
Dec.	8,593	336,228	31,628
Total	227,538	1,155,931	503,715
1987			
Jan.	13,615	108,916	48,558
Feb.	19,154	131,631	20,745
Mar.	21,513	134,011	32,206
Apr.	28,569	92,943	47,763
May	27,497	46,567	31,270
June	35,431	95,977	35,143
July	14,568	28,333	40,183
Aug.	13,461	3,419	34,300
Sept.	11,138	12	37,560
Oct.	17,638	0	35,499
Nov.	20,549	4,950	31,787
Dec.	21,577	288,173	50,849
Total	244,710	934,932	445,863
1988			
Jan.	28,013	304,053	58,942
Feb.	29,193	233,635	43,759
Mar.	34,848	95,394	53,682
Apr.	30,899	58,169	55,393
May	44,319	32,816	51,366
June	41,631	5,043	62,137
July	25,098	0	53,360
Aug.	48,177	8	83,256
Sept.	56,200	0	104,310
Oct.	53,307	178	108,945
Nov.	56,006	4,184	106,901
Dec.	29,016	107,805	53,074
Total	476,707	841,285	835,125
1989			
Jan.	52,285	105,822	162,762
Feb.	34,515	146,996	103,245

Table 38--U.S. live cattle trade 1/

Country or area	Annual 1988	January-February		Percent change
		1988	1989	
	Million pounds			Percent
Imports				
Mexico	844.2	539.8	253.0	-53.1
Canada	487.5	59.1	88.1	49.0
Other	.5	.3	.3	23.3
Total	1,332.2	599.2	341.4	-43.0
Exports				
Mexico	257.1	4.8	49.2	922.0
Canada	15.3	2.7	2.1	-23.2
Other	49.0	6.3	5.4	-14.8
Total	321.4	13.8	56.6	311.1

1/ May not add due to rounding. Percent change calculated from unrounded data.

Table 39--U.S. beef and veal trade, carcass weight 1/

Country or area	Annual 1988	January-February		Percent change
		1988	1989	
	Million pounds			Percent
Imports				
Australia	1,081.5	252.7	121.6	-51.9
New Zealand	641.0	116.1	154.2	32.8
Canada	172.0	31.9	42.1	31.7
Brazil	117.8	12.6	12.5	-0.9
Argentina	184.3	33.8	31.4	-7.0
Central America	177.2	20.3	21.7	7.2
Other	32.0	5.3	4.9	-8.4
Total	2,405.8	472.8	388.4	-17.8
Exports				
Japan	503.5	60.8	83.7	37.7
Canada	52.6	7.0	11.9	69.0
Caribbean	22.9	3.4	2.5	-26.1
Other	111.0	13.8	18.6	34.6
Total	690.0	85.0	116.7	37.2

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

U.S. Beef and Veal Imports Declining

Imports of beef and veal, carcass weight, for 1989 will likely drop around 7 percent from last year; imports during January-February 1989 declined 18 percent. The major drop has occurred in imports from Australia. New Zealand and Canada have increased shipments to the United States so far this year. Australia, New Zealand, and Canada are the major suppliers of fresh, chilled, or frozen beef to the United States.

Last year Australia supplied 45 percent of total U.S. beef and veal imports as their shipments increased 8 percent to 1,081 million pounds from 1987. Imports from Australia for the first 2 months of 1989 were down 52 percent. Increased heifer retention is holding down production because producers in Australia have resumed a gradual increase in herd size. Expansion in shipments to the Japanese and Korean markets is offsetting declines in shipments to the U.S. market.

U.S. imports of beef and veal from New Zealand totaled 641 million pounds, up 5 percent in 1988, 27 percent of all beef and veal imports. For January-February 1989, imports from New Zealand rose 33 percent, but this gain will probably not persist in the remainder of 1989. For all of 1989, New Zealand's beef production will likely decline. Slaughter and exports have been up in the beginning of the year in New Zealand because of dry weather conditions.

For the first 2 months of 1989, imports of beef and veal from Canada were up 32 percent. Imports of beef from Canada are no longer covered under the Meat Import Law because of the U.S.-Canadian trade agreement. The trigger level for 1989, with the exclusion of Canada, has been reduced to 1,369.8 million pounds, product weight.

U.S. Beef and Veal Exports Rising

Exports of beef and veal for 1989 are forecast to increase at least 8 percent. For January-February 1989, beef and veal exports were up 37 percent.

Japan is the major market, receiving 74 percent of total U.S. exports of beef in 1988. With the signing of the U.S.-Japan Beef and Citrus Agreement in July 1988, Japanese imports of beef have expanded rapidly. The United States (the primary source of high quality fed beef) continues to increase its share of the expanding Japanese market and now accounts for about half of Japanese imports.

Japanese beef output increased marginally in 1988, but is forecast to rise 3 percent in 1989. The dairy sector supplies the majority of the feeder cattle. A beef-calf deficiency payment program has been initiated to help small beef breeders stay in business, because increased imports are expected to reduce prices.

In 1988 the United States shipped 33 million pounds of beef to the EC. The EC has restricted imports of meat produced with anabolic growth promotants. A tentative agreement has been reached that would allow individual producers to market their meat to the EC if they can certify that it was produced without growth promotants. However, little beef is expected to be shipped to the EC in 1989.

The interim measure does not cover variety meats, which accounts for the majority of trade in beef products. In 1988 the United States shipped \$97 million of beef variety meats and \$32 million of beef to the EC. A limited amount of beef variety meat will be exported to the EC for pet food, which is excluded from the ban.

U.S. shipments to Korea should increase only marginally this year because Australia will probably capture most of the Korean market. The Koreans prefer the lean, grass fed beef not generally supplied to world markets by the United States.

Because of U.S. GSM-102 guaranteed credit programs and actions by the Mexican Government to increase imports,

U.S. exports of beef to Mexico climbed 248 percent last year to 37 million pounds. For fiscal year 1988, Mexico had available from the United States \$18 million in GSM-102 credit guarantees for purchases of fresh/chilled meat. As of April 1989, all but \$2 million had been approved. Unless additional funds are made available, U.S. beef exports to Mexico will likely decline.

Table 40.--U.S. beef imports, carcass weight

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan-Dec.
Thousand pounds													
1983													
Australia	103,576	72,895	47,501	54,249	74,573	69,711	75,462	71,819	75,771	95,156	50,763	37,776	829,252
N. Zealand	36,088	42,357	49,004	60,127	55,255	60,068	61,834	56,540	41,669	8,805	1,419	975	474,141
Canada	20,027	16,208	23,077	17,537	13,222	12,859	14,187	17,516	12,798	8,103	6,402	2,703	164,639
Brazil	13,749	13,926	11,749	12,598	11,624	9,328	11,810	14,954	6,592	13,522	8,998	6,801	135,651
Argentina	17,078	11,622	16,549	9,574	13,757	12,813	13,482	12,742	15,629	13,370	11,034	10,010	157,660
Other	23,078	21,091	12,604	19,054	17,280	7,909	14,287	10,984	14,533	23,445	26,160	22,021	212,446
Total	213,596	178,099	160,484	173,139	185,711	172,688	191,062	184,505	166,992	162,401	104,776	80,286	1,973,789
1984													
Australia	72,513	58,713	44,134	54,878	40,495	22,762	71,185	70,140	73,633	112,906	53,348	48,552	723,259
N. Zealand	22,932	26,819	50,004	41,544	27,344	19,978	55,068	50,230	40,889	43,153	18,197	19,869	416,027
Canada	18,349	25,379	20,720	20,198	16,845	12,155	10,959	12,225	11,517	16,698	23,940	19,720	208,705
Brazil	15,618	8,013	9,091	17,792	11,866	14,674	11,711	15,305	10,520	11,100	14,674	11,648	152,012
Argentina	14,890	13,005	14,555	14,248	7,709	12,021	13,211	15,965	12,794	7,660	11,383	6,135	143,576
Other	23,877	19,689	12,160	15,765	11,273	9,469	13,536	12,317	12,505	15,219	17,263	16,437	179,510
Total	168,179	151,618	150,664	164,425	115,532	91,059	175,670	176,182	161,858	206,736	138,805	122,361	1,823,089
1985													
Australia	57,122	34,299	27,400	55,527	69,296	70,139	93,178	97,027	82,579	63,482	61,722	78,661	790,432
N. Zealand	31,731	36,291	38,366	62,867	57,154	42,838	57,637	62,278	46,651	34,393	14,013	20,815	505,034
Canada	14,886	24,996	26,335	17,000	17,419	17,519	14,162	14,940	18,661	18,759	26,474	26,374	237,525
Brazil	12,137	7,170	15,662	10,719	13,276	14,783	13,708	8,455	16,175	9,865	8,825	8,388	139,163
Argentina	16,710	13,043	12,173	10,024	11,726	14,444	19,027	12,784	24,175	15,138	16,739	12,756	178,739
Other	19,075	17,998	14,203	19,138	15,285	18,155	11,674	17,854	21,623	20,173	23,528	21,319	220,025
Total	151,661	133,797	134,139	175,275	184,156	177,878	209,386	213,338	209,864	161,810	151,301	168,313	2,070,918
1986													
Australia	79,726	60,000	53,929	74,821	75,029	87,250	88,249	88,513	84,204	91,364	95,706	61,637	940,428
N. Zealand	27,144	31,452	38,808	16,704	22,737	56,157	87,393	65,992	58,692	32,589	26,932	29,320	493,920
Canada	22,928	26,574	20,494	15,365	15,348	14,124	16,168	16,418	16,820	12,791	17,825	12,577	207,432
Brazil	8,823	8,970	5,839	7,292	8,365	6,215	11,526	10,887	8,521	5,916	4,249	3,815	90,418
Argentina	17,407	12,921	15,433	12,064	13,038	9,913	13,442	10,775	12,956	12,547	14,056	13,312	157,864
Other	31,174	19,510	20,554	16,920	14,064	16,622	15,554	15,373	18,493	21,098	25,600	23,744	238,706
Total	187,202	159,427	155,057	143,166	148,581	190,281	232,332	207,958	199,686	176,305	184,368	144,405	2,128,768
1987													
Australia	72,795	68,314	78,020	89,437	79,127	104,782	123,488	97,068	106,534	96,679	49,877	26,888	993,009
N. Zealand	42,192	54,527	65,081	62,693	54,578	84,626	78,209	66,426	50,346	26,471	7,338	8,402	600,889
Canada	17,136	17,911	18,102	14,122	13,668	11,627	13,233	12,274	14,226	16,975	18,726	14,571	182,571
Brazil	4,029	5,813	3,388	2,885	5,437	10,185	7,710	12,764	11,274	14,486	12,032	10,350	100,353
Argentina	13,021	24,991	16,188	13,576	21,740	12,123	16,053	17,231	15,259	10,919	16,773	11,268	189,142
Other	12,126	15,724	13,557	16,654	15,065	14,798	13,775	9,310	15,643	22,989	29,133	24,569	203,343
Total	161,299	187,280	194,336	199,367	189,615	238,141	252,468	215,073	213,282	188,519	133,879	96,048	2,269,307
1988													
Australia	167,951	83,610	101,725	110,766	84,350	109,849	67,027	96,503	59,948	58,803	83,058	49,974	1,073,564
N. Zealand	58,993	53,453	78,278	55,803	60,411	84,990	69,741	74,354	44,747	30,855	13,312	6,401	631,338
Canada	14,230	16,025	14,591	11,758	11,999	12,270	9,752	12,769	13,583	14,406	18,346	12,944	162,673
Brazil	6,866	5,769	8,874	10,228	6,624	16,689	12,014	12,880	13,407	9,441	7,074	7,942	117,808
Argentina	16,057	17,717	13,494	12,555	14,454	12,751	14,941	18,798	18,256	15,888	15,915	13,433	184,259
Other	11,267	14,323	19,493	17,450	15,975	19,012	11,688	14,612	19,681	22,096	23,248	20,390	209,235
Total	275,364	190,897	236,455	218,560	193,813	255,561	185,163	229,916	169,622	151,489	160,953	111,084	2,378,877

Table 41.--U.S. beef exports, carcass weight

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan-Dec.
Thousand pounds													
1983													
Japan	13,270	15,711	18,672	17,275	12,968	9,374	9,599	19,421	20,095	21,967	18,714	10,957	188,023
Canada	751	1,123	881	1,234	909	2,060	1,083	1,170	2,018	1,315	1,007	503	14,054
Caribbean	1,881	2,127	1,786	2,168	1,330	2,279	2,470	2,043	1,948	2,114	2,764	1,737	24,647
Other	4,392	2,451	3,769	3,392	3,156	5,814	6,294	2,939	2,541	3,541	4,132	2,951	45,372
Total	20,294	21,412	25,108	24,069	18,363	19,527	19,446	25,573	26,602	28,937	26,617	16,148	272,096
1984													
Japan	20,179	20,046	28,860	19,361	17,530	13,093	16,415	24,238	24,431	22,460	20,067	17,471	244,151
Canada	1,676	2,191	2,345	1,500	2,596	2,075	3,106	3,553	2,426	1,968	2,189	1,886	27,511
Caribbean	1,446	1,955	2,138	1,570	1,591	1,642	1,651	1,860	1,375	1,855	2,422	2,875	22,380
Other	3,284	2,765	3,161	2,851	3,236	3,500	3,013	2,003	2,533	2,467	3,392	2,515	34,720
Total	26,585	26,957	36,504	25,282	24,953	20,310	24,185	31,654	30,765	28,750	28,070	24,747	328,762
1985													
Japan	22,526	16,186	22,953	22,189	19,864	14,109	17,871	28,273	29,666	28,224	19,807	17,428	259,096
Canada	1,767	2,844	2,231	1,832	1,728	2,652	2,389	2,256	1,716	1,396	877	657	22,345
Caribbean	1,509	1,463	1,585	1,353	1,869	1,281	1,362	1,022	784	872	1,453	980	15,533
Other	2,448	2,295	3,766	4,527	3,325	2,387	1,626	2,491	1,809	2,127	2,557	1,837	31,195
Total	28,250	22,788	30,535	29,901	26,786	20,429	23,248	34,042	33,975	32,619	24,694	20,902	328,169
1986													
Japan	33,447	27,921	25,037	27,067	22,249	18,193	24,967	35,803	31,756	42,387	33,268	31,821	353,916
Canada	955	1,421	1,104	904	1,157	1,631	2,115	1,312	2,004	1,028	1,110	1,669	16,410
Caribbean	1,251	1,260	1,659	1,152	1,350	1,227	1,320	1,402	1,243	1,245	2,256	1,900	17,265
Other	1,939	3,085	2,587	2,593	3,317	1,879	1,635	13,882	26,097	31,055	12,939	32,279	133,287
Total	37,592	33,687	30,387	31,716	28,073	22,930	30,037	52,399	61,100	75,715	49,573	67,669	520,878
1987													
Japan	29,769	22,178	22,793	31,946	39,371	30,914	29,338	26,748	36,282	42,409	51,314	33,628	396,690
Canada	1,752	2,121	1,876	1,930	2,618	2,979	3,293	3,272	2,911	2,910	2,295	2,973	30,930
Caribbean	1,494	1,697	1,772	1,824	1,515	1,437	1,831	1,993	1,801	1,828	2,108	2,337	21,637
Other	19,405	9,430	12,206	5,400	5,069	10,652	18,258	18,845	14,665	16,568	11,335	12,939	154,772
Total	52,420	35,426	38,647	41,100	48,573	45,982	52,720	50,858	55,659	63,715	67,052	51,877	604,029
1988													
Japan	32,551	28,134	37,574	42,277	40,447	38,481	35,495	46,232	51,285	51,045	54,629	43,027	501,177
Canada	3,191	2,587	3,833	2,925	3,320	4,852	3,481	4,992	3,781	3,043	4,727	4,828	45,560
Caribbean	1,807	1,585	2,392	1,566	1,653	1,566	1,877	1,915	1,722	2,302	2,080	2,279	22,744
Other	5,875	7,946	6,171	5,521	5,662	7,268	9,702	12,979	14,405	11,471	12,606	10,704	110,310
Total	43,424	40,252	49,970	52,289	51,082	52,167	50,555	66,118	71,193	67,861	74,042	60,838	679,791

Table 42.--U.S. veal imports, carcass weight 1/

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan-Dec.
Thousand pounds													
1983													
Australia	642	374	278	516	700	438	382	146	224	816	607	200	5,323
N. Zealand	3,229	1,771	1,955	1,121	1,043	614	40	123	963	565	0	38	11,462
Canada	41	77	169	197	272	274	241	214	109	74	64	15	1,746
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0
Argentina	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	6	0	5	0	0	0	0	0	0	0	0	11
Total	3,911	2,228	2,403	1,840	2,015	1,326	663	482	1,295	1,455	670	252	18,540
1984													
Australia	272	137	244	172	313	147	310	481	293	1,144	600	710	4,824
N. Zealand	3,935	2,297	2,049	709	265	236	637	124	340	1,920	1,421	1,051	14,983
Canada	107	176	349	522	506	557	210	276	137	270	312	273	3,695
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0
Argentina	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	77	156	126	40	44	0	40	40	78	601
Total	4,314	2,611	2,642	1,479	1,240	1,066	1,197	925	771	3,374	2,372	2,112	24,102
1985													
Australia	333	209	296	778	486	522	137	150	365	357	508	488	4,628
N. Zealand	1,591	830	517	1,698	524	571	263	230	343	989	1,003	2,548	11,108
Canada	285	163	266	302	330	259	299	379	257	119	179	93	2,933
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0
Argentina	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	80	120	160	163	136	79	42	204	42	0	0	0	1,026
Total	2,289	1,322	1,239	2,941	1,476	1,432	741	964	1,007	1,465	1,690	3,129	19,696
1986													
Australia	494	494	108	539	492	473	428	181	321	800	1,039	553	5,922
N. Zealand	2,595	2,135	794	54	307	372	549	262	465	2,139	2,892	2,583	15,147
Canada	182	239	280	341	606	677	474	460	971	179	788	357	5,555
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0
Argentina	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	37	128	0	0	0	0	0	0	0	0	0	0	165
Total	3,308	2,996	1,181	933	1,405	1,521	1,451	903	1,758	3,118	4,720	3,494	26,789
1987													
Australia	456	362	150	125	55	421	497	349	644	1,057	273	38	4,426
N. Zealand	1,954	605	450	523	484	74	134	52	2,315	3,868	1,061	222	11,742
Canada	817	522	762	752	670	550	720	793	565	539	576	832	8,098
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0
Argentina	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	175	48	0	0	0	0	0	0	223
Total	3,226	1,489	1,362	1,401	1,384	1,093	1,351	1,193	3,524	5,463	1,911	1,091	24,488
1988													
Australia	681	491	397	348	310	427	420	640	1,029	1,575	1,014	560	7,894
N. Zealand	2,519	1,159	1,499	483	31	159	38	140	1,155	1,712	582	191	9,669
Canada	864	820	1,034	854	773	631	840	843	798	644	716	543	9,362
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0
Argentina	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	4	0	0	12	1	1	24	1	0	43
Total	4,064	2,471	2,931	1,689	1,114	1,218	1,311	1,623	2,984	3,956	2,313	1,294	26,967

1/ Data may not add due to rounding.

Table 43.--U.S. veal exports, carcass weight 1/

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan-Dec.
Thousand pounds													
1983													
Japan	1	25	42	6	0	34	39	9	3	5	58	3	226
Canada	191	189	255	371	142	327	318	232	215	225	242	52	2,758
Caribbean	39	23	38	33	40	50	11	54	31	98	33	30	481
Other	9	2	169	64	39	31	102	31	52	57	33	16	606
Total	240	240	503	475	221	443	470	326	301	384	366	101	4,071
1984													
Japan	0	23	41	10	48	16	85	44	7	11	27	18	329
Canada	191	354	283	203	420	469	537	386	446	278	457	391	4,415
Caribbean	18	32	88	30	34	37	43	30	19	25	28	33	417
Other	33	16	53	28	19	12	36	13	28	159	54	49	502
Total	243	425	465	272	522	534	701	473	500	473	566	492	5,663
1985													
Japan	15	3	70	12	143	13	5	37	11	14	32	120	476
Canada	238	251	214	123	240	242	464	205	183	154	30	213	2,557
Caribbean	13	20	17	24	9	3	20	8	4	7	4	13	140
Other	24	27	6	56	39	34	84	18	16	14	41	97	456
Total	290	301	307	215	431	293	574	268	213	189	107	442	3,630
1986													
Japan	154	31	6	40	43	17	0	77	14	32	77	0	491
Canada	72	159	225	152	175	308	488	419	606	425	252	524	3,804
Caribbean	9	39	6	8	6	6	5	13	3	15	11	27	147
Other	63	69	61	52	3	14	1	15	8	4	22	28	339
Total	298	299	298	252	226	346	494	524	631	475	362	579	4,782
1987													
Japan	10	9	2	16	14	27	8	18	34	4	71	63	276
Canada	390	629	637	758	435	470	412	249	381	164	577	851	5,953
Caribbean	5	6	9	4	9	21	30	6	8	11	22	42	172
Other	57	48	52	23	24	13	5	27	20	13	3	23	309
Total	461	691	701	801	482	531	455	300	444	193	673	979	6,710
1988													
Japan	6	64	85	17	100	327	122	299	334	654	265	16	2,289
Canada	560	700	540	398	721	868	344	914	548	535	447	506	7,081
Caribbean	3	8	12	20	21	19	14	9	22	8	40	21	196
Other	2	21	14	5	28	20	143	35	55	75	90	171	660
Total	571	793	652	440	870	1,234	623	1,257	959	1,271	841	714	10,225

1/ Data may not add due to rounding.

The United States on January 1, 1989, revised the trade reporting codes in order to bring them into accord with the International Harmonized System. As a result trade in beef is now being combined with veal into bovine categories. In the situation and outlook tables, trade in beef and veal will be combined beginning in 1989 and be reported only on the beef table; no trade will be reported on the veal table. In 1988 veal represented 1.1 percent of total bovine imports and 1.4 percent of exports. In order that analysts can compare beef and veal trade by country, a historical trade series is being presented in the same format as that reported in the monthly Livestock and Poultry Update.

Sheep and Lambs

Sheep and lamb production in the first quarter of 1989 was 87 million pounds, 2 percent higher than a year earlier. The increases occurred early in the quarter as January and February production exceeded that of the previous year. Production in March (the month in which most of the spring religious holidays occurred) was down 6 percent from 1988 levels. Production for the rest of the year should remain near year-ago levels. Second and third quarter production should reach about 80 million pounds. Fourth quarter production should equal 83 million pounds, slightly below a year ago. Per capita consumption for 1989 should remain even with 1988 as production gains are offset by population growth.

Lamb prices at San Angelo averaged \$69.29 in the first quarter, down from \$81.51 in 1988. Feeder lamb prices averaged \$88.19 for the first quarter of 1989, down from \$112.52 in 1988. San Angelo slaughter lamb prices are expected to average \$70-\$72 per cwt in the second quarter and then drop to the low \$60's range in the second half of the year, about the same level as last year.

Table 44--Commercial sheep and lamb slaughter 1/ and production

Year	Lambs	Sheep	Total	Dressed weight	Production
	-----1,000 hd.-----			lb.	Mil lb.
1986					
I	1,438	72	1,510	60	90
II	1,246	97	1,343	58	78
III	1,324	80	1,404	58	81
IV	1,306	72	1,378	60	82
Year	3,514	321	5,635	59	331
1987					
I	1,213	57	1,270	60	76
II	1,211	79	1,290	58	75
III	1,241	75	1,316	59	77
IV	1,253	70	1,323	61	81
Year	4,918	281	5,199	59	309
1988					
I	1,292	62	1,354	63	85
II	1,178	82	1,260	63	80
III	1,255	80	1,335	60	80
IV	1,265	79	1,344	62	84
Year	4,990	303	5,293	62	329
1989					
I	1,307	66	1,373	63	87

1/ Classes estimated.

U.S. Feeder Lamb Imports

Imports of lambs and sheep for 1988 totaled 36,922 head, up 39 percent from 1987. The large increase can be attributed to live lamb imports from New Zealand—11,491 head. The primary source historically has been Canada.

In March 1988 the USDA's Animal Plant Health and Inspection Service suspended the importation of live lambs into Portland, Oregon while it rewrote regulations governing the importation of live lambs into a private facility. The suspension has now been lifted, and 1989's first shipment from New Zealand of 27,000 lambs arrived in Portland in May, with a second shipment of 27,000 head arriving after the first shipment has been released from quarantine and into feedlots. Permits for live lamb importation have been issued for 54,000 head.

U.S. Sheep Exports

In 1988, U.S. sheep exports totaled 174,597 head, up 315 percent from 1987. Shipments to Mexico are largely responsible for the dramatic increase. Canada, which took over half of U.S. sheep exports in 1987, bought only a 16-percent share in 1988. Mexico boosted its imports from 16,119 to 139,109 head.

In an attempt to hold down inflation and meat prices during an election year, the Mexican Government liberalized its regulations to encourage imports of meat and live animals. U.S. exports of sheep to Mexico have remained strong during January-February 1989, at 42,688 head, up from 2,928 head during the same period last year.

U.S. Lamb and Mutton Imports

Imports of lamb (mainly from Australia and New Zealand) and mutton (mainly from Australia) rose 16 percent last year to 51 million pounds, carcass weight. Imports comprised 13 percent of the lamb and mutton supply in 1988. For January-February 1989, imports have dropped 22 percent, mainly because of a decline in mutton imports. Imports of fresh or frozen lamb were up 17 percent to 6 million pounds.

Hogs

Breeding Inventories Cut as Poor Returns Persist

Hog producers have cut breeding herds in response to two consecutive quarters of negative returns. Accordingly, fewer sows are expected to farrow during March-August than a year earlier. However, there is little evidence that a major herd liquidation is underway.

Net returns to hog producers have generally been below breakeven since September 1988. Returns dropped sharply last summer as the drought pushed feed costs higher, and deteriorated further as hog prices weakened under the pres-

Table 45--Hogs on farms March 1, farrowings and pig crops, 10 States 1/

Item	1984	1985	1986	1987	1988	1989	1988/87	1989/88
-----1,000 head-----						---Percent change---		
Inventory	40,070	39,680	38,210	38,520	41,345	41,255	7	0
Breeding	5,446	5,220	4,948	5,240	5,520	5,380	5	-3
Market	34,624	34,460	33,262	33,280	35,825	35,875	8	0
Under 60 lb	12,437	12,701	12,350	12,666	13,875	13,680	10	-1
60-119 lb	8,561	8,427	8,046	7,984	8,530	8,598	7	1
120-179 lb	7,769	7,580	7,276	7,152	7,435	7,475	4	1
180 + lb	5,587	5,752	5,590	5,478	5,985	6,122	9	2
Sows farrowing								
Dec. 2/-Feb.	1,964	1,955	1,863	1,924	2,123	2,094	10	-1
March-May	2,481	2,420	2,171	2,364	2,578	2,449 3/	9	-5
Dec. 2/-May	4,445	4,375	4,034	4,288	4,701	4,543	10	3
June-Aug.	2,259	2,191	2,074	2,284	2,359	2,263 3/	3	2
Sept.-Nov.	2,316	2,265	2,115	2,266	2,261		0	
June-Nov.	4,575	4,456	4,189	4,550	4,620		2	
Pig crops								
Dec. 2/-Feb.	14,288	14,690	14,254	14,920	16,489	16,321	11	-1
Mar.-May	18,814	18,762	16,957	18,704	20,175		8	
Dec. 2/-May	33,102	33,452	31,211	33,624	36,664		9	
June-Aug.	17,158	16,941	16,164	17,692	18,007		2	
Sept.-Nov.	17,420	17,255	16,460	17,572	17,216		-2	
June-Nov.	34,578	34,196	32,624	35,264	35,223		0	
Number								
Pigs per litter								
Dec. 2/-Feb.	7.27	7.51	7.65	7.75	7.77	7.79	0	0
March-May	7.58	7.75	7.81	7.91	7.83		-1	
Dec. 2/-May	7.45	7.65	7.74	7.84	7.80		-1	
June-Aug.	7.60	7.73	7.79	7.75	7.63		-2	
Sept.-Nov.	7.52	7.62	7.78	7.75	7.61		-2	
June-Nov.	7.56	7.67	7.79	7.75	7.62		-2	

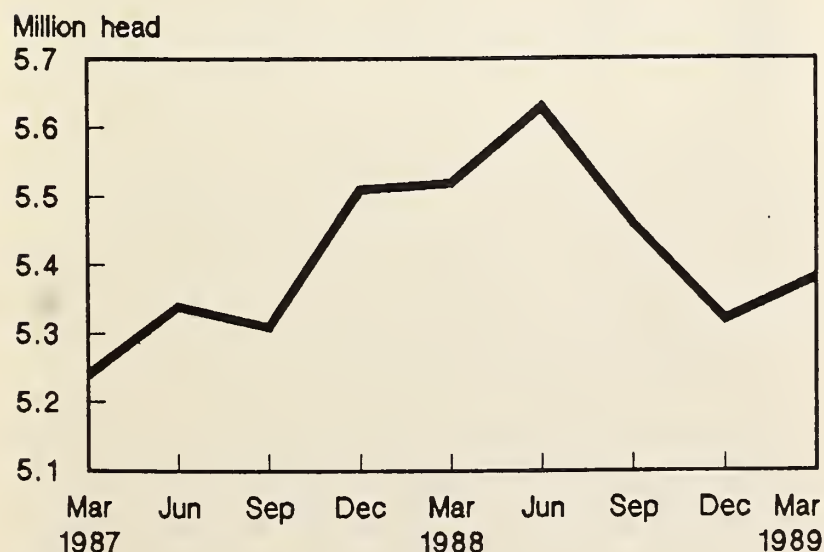
1/ Ga., Ill., Ind., Ia., Kan., Minn., Mo., Neb., N.C., and Ohio. 2/ Dec. preceding year. 3/ Intentions.

sure of heavy supplies. Farrow-to-finish operations lost an estimated \$7 per cwt after all costs (including overhead and replacement) in fourth-quarter 1988, and another \$7 per cwt in first-quarter 1989.

Producers responded to the unfavorable returns by reducing the number of sows and gilts being bred. As of March 1, 1989, the U.S. breeding inventory was 2 percent below a year earlier. Reflecting the decline in the breeding herd,

producers reported intentions to have 3 percent fewer sows farrow during March-May 1989 than a year earlier, and 4 percent fewer during June-August. The largest hog producing States showed some of the greatest cutbacks. Breeding inventories in Iowa, Illinois, Indiana, and Missouri ranged 4-7 percent below a year earlier as of March 1, 1989. At the same time, significant increases occurred in many of the quarterly-reporting States (Minnesota, Kansas, Ohio, Kentucky, Pennsylvania, South Dakota, and Tennessee).

Figure 8

Hogs Kept for Breeding

10 States.

Table 46--Sow slaughter balance sheet, 10 States

Item	1986	1987	1988	1989
-----Million head-----				
December 1 breeding 1/	5.3	5.1	5.5	5.3
December-February				
Comm. sow slaughter 2/	.7	.6	.7	.7
Gilts added	.3	.7	.7	.7
March 1 breeding	4.9	5.2	5.5	5.4
March-May				
Comm. sow slaughter 2/	.6	.6	.7	
Gilts added	.6	.7	.8	
June 1 breeding	4.9	5.3	5.6	
June-August				
Comm. sow slaughter 2/	.7	.8	.9	
Gilts added	.7	.8	.8	
September 1 breeding	4.9	5.3	5.5	
September-November				
Comm. sow slaughter	.7	.7	.8	
Gilts added	.9	.8	.6	

1/ December previous year. 2/ 75 percent of estimated U.S. commercial sow slaughter.

So far, the decline in breeding inventories suggests a relatively minor downward adjustment in hog production. Between June 1988 and March 1989 the 10-State breeding herd decreased 5 percent. This figure can be compared with reductions of 7-18 percent over the same period in past years when profitability exhibited a similar downturn (1974/75, 1980/81, and 1983/84). Assuming normal crop conditions

this summer, net returns to hog producers likely will remain negative in the second half of 1989, but returns after cash expenses should average near breakeven. In this case, breeding inventories are expected to stabilize by the end of the year. On the other hand, if poor crop conditions drive feed costs still higher, a more severe cutback in breeding inventories would be likely.

Table 47--Farrow-to-finish hog production costs and returns, 1,600 head annual sales, North Central Region 1/

Item	1988								1989			
	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Dollars per cwt												
Cash receipts: 2/												
Market hogs (94.25 lb)	44.43	45.94	43.25	43.63	38.91	37.20	34.96	38.41	39.48	38.75	37.53	34.73
Cull sows (5.75 lb)	2.10	1.90	1.76	1.90	1.86	1.75	1.55	1.62	1.86	1.96	1.94	1.80
Total	46.53	47.84	45.01	45.53	40.77	38.95	36.51	40.03	41.34	40.71	39.47	36.53
Cash expenses:												
Feed--												
Corn (345.6 lb)	10.37	10.41	10.60	10.66	11.50	13.50	14.93	14.76	14.64	14.40	14.44	15.27
Soybean meal (70.6 lb)	8.43	8.43	8.43	9.92	9.92	9.92	11.03	11.03	11.03	11.67	11.67	11.67
Mixing concentrates (14.3 lb)	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.86	2.86	2.86	2.86	2.86
Total feed	21.65	21.69	21.88	23.43	24.27	26.27	28.82	28.65	28.53	28.93	28.97	29.80
Other:												
Veterinary and medicine 3/	0.73	0.73	0.73	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74
Fuel, lube, and electricity	1.50	1.50	1.50	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51
Machinery and building repairs	2.45	2.45	2.45	2.45	2.45	2.46	2.46	2.46	2.46	2.46	2.46	2.46
Hired labor 4/	1.42	1.42	1.39	1.39	1.38	1.43	1.43	1.43	1.43	1.43	1.43	1.43
Miscellaneous	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.62	0.62	0.62	0.62	0.62
Total variable expenses	28.36	28.40	28.56	30.12	30.96	33.01	35.58	35.41	35.29	35.69	35.73	36.56
General farm overhead	1.62	1.67	1.57	1.59	1.42	1.36	1.28	1.40	1.45	1.42	1.38	1.28
Taxes and insurance	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.74	0.74	0.74	0.74	0.74
Interest	3.96	4.07	3.83	3.87	3.47	3.31	3.12	3.42	3.53	3.48	3.37	3.12
Total fixed expenses	6.29	6.45	6.11	6.17	5.60	5.38	5.14	5.56	5.72	5.64	5.49	5.14
Total cash expenses 5/	34.65	34.85	34.67	36.29	36.56	38.39	40.72	40.97	41.01	41.33	41.22	41.70
Receipts less cash expenses	11.88	12.99	10.34	9.25	4.21	0.56	-4.21	0.94	0.33	-0.62	-1.75	-5.17
Capital replacement	5.90	5.90	5.90	5.93	5.93	5.93	5.94	5.94	5.94	5.94	5.94	5.94
Receipts less cash expenses and replacement	5.98	7.09	4.44	3.31	-1.72	-5.37	-10.15	-6.88	-5.61	-6.56	-7.69	-11.11

1/ The feed rations and expense items do not necessarily coincide with the experience of individual hog operations and are an average of a group of operators. For individual use, adjust expenses and prices for management, production levels and locality of operation. 2/ Based on 94.25 lb of barrows and gilts liveweight and 5.75 lb of sows per cwt sold. 3/ Includes costs for feed medication, which is usually included as part of the feed cost. 4/ Based on .204 hours per cwt of liveweight hog marketed. 5/ Does not include a charge for family or operator labor (.732 hours) or a charge for land and fixed assets.

Table 48--Corn Belt hog feeding: Selected costs at current rates 1/

Purchased during 1988-89 Marketed during 1988-89	May Sept.	June Oct.	July Nov.	Aug. Dec.	Sept. Jan.	Oct. Feb.	Nov. Mar.	Dec. Apr.	Jan. May	Feb. June	Mar. July	Apr. May
Expenses: (\$/head)												
40-50 lb feeder pig	46.85	31.40	27.57	27.39	28.30	30.95	27.99	29.17	35.25	34.18	39.55	34.73
Corn (11 bu)	21.34	26.46	29.86	28.88	28.38	28.00	22.00	27.45	28.22	28.32	28.60	27.78
Protein supplement (130 lb)	20.02	20.02	25.29	25.29	25.29	23.92	23.92	23.92	23.21	23.21	23.21	22.04
Total feed	41.36	46.48	55.15	54.17	53.67	51.92	45.92	51.37	51.43	51.53	51.81	49.82
Labor & management (1.3 hr)	12.27	12.27	12.12	12.12	12.12	12.61	12.61	12.61	13.47	13.47	13.47	12.90
Vet medicine 2/	2.74	2.74	2.80	2.80	2.80	2.83	2.83	2.83	2.86	2.86	2.86	2.89
Interest on purchase (4 mo)	1.72	1.15	1.03	1.02	1.05	1.20	1.08	1.13	1.40	1.36	1.57	1.44
Power, equip, fuel, shelter depreciation 2/	6.67	6.67	6.81	6.81	6.81	6.87	6.87	6.87	6.95	6.95	6.95	7.03
Death loss (4% of purchase)	1.87	1.26	1.10	1.10	1.13	1.24	1.12	1.17	1.41	1.37	1.58	1.39
Transportation (100 miles)	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48
Marketing expenses	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Miscel. & indirect costs 2/	.68	.68	.70	.70	.70	.70	.70	.70	.71	.71	.71	.72
Total	115.78	104.27	108.90	107.73	108.20	109.94	100.74	107.47	115.10	114.05	120.12	112.54
Selling price required to cover: (\$/cwt)												
Feed and feeder costs (220 lb)	40.10	35.40	37.60	37.07	37.26	37.67	33.60	36.61	39.40	38.96	41.53	38.43
All costs (220 lb)	52.63	47.40	49.50	48.97	49.18	49.97	45.79	48.85	52.32	51.84	54.60	51.15
Feed cost per 100-lb gain (180 lb)	22.98	25.82	30.64	30.09	29.82	28.84	25.51	28.54	28.57	28.63	28.78	27.68
Barrows and gilts, (7 mkts)	41.04	38.95	36.45	40.58	41.58	40.91	39.85	37.06				
Net margin	-11.59	-8.45	-13.05	-8.39	-7.60	-9.06	-5.94	-11.79				
Prices:												
40-lb feeder pig (So. Missouri) \$/head	46.85	31.40	27.57	27.39	28.30	30.95	28.21	29.17	35.25	34.18	39.55	34.73
Corn \$/bu 3/	1.94	2.42	2.72	2.62	2.58	2.54	2.00	2.50	2.56	2.58	2.60	2.52
Protein supp. (38-42%) \$/cwt 4/	15.40	15.40	19.45	19.45	19.45	18.40	18.40	18.40	17.85	17.85	17.85	16.95
Labor & management \$/hr 5/	9.44	9.44	9.32	9.32	9.32	9.70	9.70	9.70	10.36	10.36	10.36	9.92
Interest rate (annual)	11.02	11.02	11.17	11.17	11.17	11.62	11.62	11.62	11.91	11.91	11.91	12.47
Transportation rate (\$/cwt 100 miles) 6/	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22
Marketing expenses (\$/cwt) 7/	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Index of prices paid by farmers (1910-14=100)	1158	1158	1182	1182	1182	1193	1193	1193	1207	1207	1207	1220

1/ Although a majority of operations in the Corn Belt are from farrow-to-finish, relative fattening expenses will be similar. Costs represent only what expenses would be if all selected items were paid for during the period indicated. The feed rations and expense items do not necessarily coincide with the experience of individual feeders. For individual use, adjust expenses and prices for management, production level, and locality of operation. 2/ Adjusted monthly by the index of prices paid by farmers for commodities, services, interest, taxes, and wage rates. 3/ Average price received by farmers in Iowa and Illinois. 4/ Average prices paid by farmers in Iowa and Illinois. 5/ Assumes an owner-operator receiving twice the farm labor rate. 6/ Converted from cents/mile for a 44,000-pound haul. 7/ Yardage plus commission fees at a Midwest terminal market.

Table 49--Commercial hog slaughter 1/ and production

Year	Barrows & gilts	Sows	Boars	Total	Dress- ed wt.	Comm'l- prod.
	----- 1,000 hd.-----				lb.	Mil lb.
1986						
I	19,272	920	187	20,379	175	3,570
II	19,224	896	196	20,316	176	3,568
III	17,365	999	210	18,573	174	3,237
IV	19,223	927	179	20,330	178	3,623
Year	75,084	3,742	772	79,598	176	13,998
1987						
I	19,008	762	170	19,940	178	3,540
II	17,877	846	188	18,911	176	3,327
III	18,201	1,009	186	19,396	174	3,384
IV	21,776	888	170	22,834	178	4,061
Year	76,862	3,505	714	81,081	177	14,312
1988						
I	20,281	890	189	21,360	177	3,790
II	19,736	941	200	20,877	179	3,727
III	19,968	1,182	228	21,378	177	3,775
IV	22,932	1,054	194	24,180	179	4,331
Year	82,916	4,068	814	87,795	178	15,623
1989						
I	20,748	943	195	21,886	178	3,887

1/ Classes estimated.

Pork Production To Decline, Prices To Strengthen in Second Half

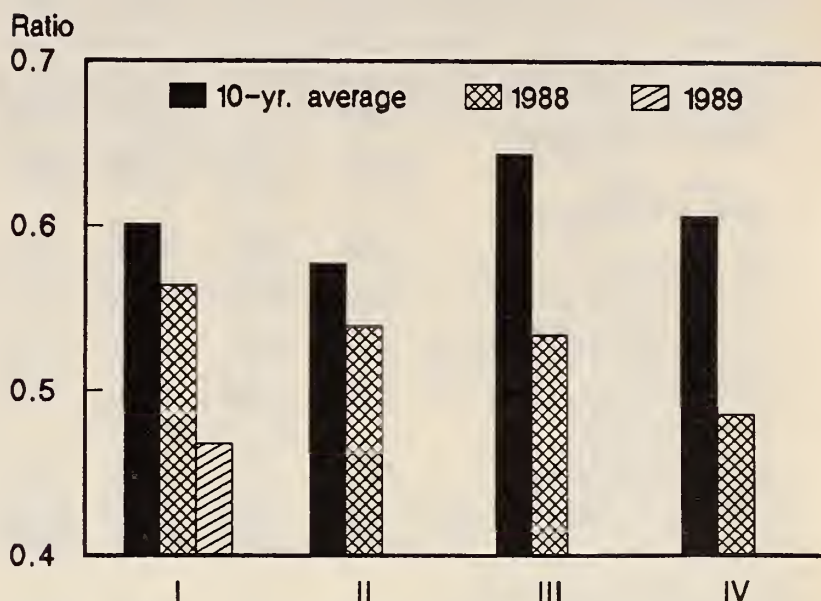
Because of the downturn in breeding inventories and farrowing intentions, pork production is expected to drop below 1988 levels in the second half of 1989. A 1-percent decline is forecast for the third quarter, followed by a 3-percent decline in the fourth. Retail pork and hog prices likely will rise above a year earlier in the fourth quarter. In the first half of 1989, prices are being pressured by increased supplies of both fresh and frozen pork, the result of a previous expansion among hog operations. Annual production may be about the same as in 1988, while average hog prices may be slightly lower.

Commercial pork production in first-quarter 1989 totaled 3.9 billion pounds, a 3-percent increase from a year earlier. Barrow and gilt prices declined \$4 per cwt, averaging \$41 per cwt at the seven markets. The first-quarter market was characterized by sluggish demand for fresh pork, an unusually steady rate of hog slaughter, and downward prices. The downtrend extended into April as hog slaughter bulged, with weekly kills averaging 8 percent above a year ago. Barrow and gilt prices slipped into the mid-\$30's per cwt before bottoming, and averaged \$37 for the month.

Since April, prices have been strengthened by a seasonal decline in hog slaughter (and possibly by increased retail featuring of pork). During the first quarter, wholesale pork prices became very cheap relative to beef and broilers. The low relative price may have inspired additional retail pork features, possibly at the expense of competing meats. In addition, the spread between wholesale and retail pork prices rose to a record high in the first quarter. While fresh pork prices dropped 8 percent and hog prices fell 9 percent from a year earlier, retail pork prices declined only 2 percent. The wide spread implies that retailers had room to expand pork

Figure 9

Ratio of Pork to Beef Cutout Value



features and still maintain adequate profit margins. As long as wholesale pork prices remain low relative to competing meats, and wholesale-to-retail spreads stay relatively large, the incentive to feature pork may continue to grow.

Weekly kills under Federal inspection were larger than anticipated in April, peaking near 1.8 million head. Weekly rates could drop to 1.5 million by early summer, based on last fall's pig crop and March 1 market hog inventories. Thus, after starting the quarter in the high \$30's per cwt, barrow and gilt prices at the seven markets could average \$41-\$43 per cwt in the current quarter. In second-quarter 1988, prices averaged \$46 per cwt. Commercial pork production is expected to approach 3.8 billion pounds, 1 percent more than a year ago.

Pork production may decline slightly from the second to third quarter, with third-quarter output falling 1 percent below a year earlier. Hog slaughter during July-September is indicated by the winter pig crop, which was down 1 percent from the previous year, and by the number of pigs under 60 pounds on March 1, down 2 percent. Barrow and gilt prices are forecast to average in the low \$40's per cwt in the summer quarter, compared with \$44 in 1988.

The rate of pork production anticipated in July and August appears to be low enough to support barrow and gilt prices in the mid-\$40's per cwt. However, prices will be influenced by the way in which the market handles the large stocks of pork in cold storage. Because freezer stocks are essentially liquidated through the summer, frozen pork supplies typically account for a significant portion of third-quarter consumption. However, beginning stocks in third-quarter 1989 could be among the highest on record. If the drawdown of freezer stocks is large this summer, pork consumption during the third quarter could exceed year-earlier levels, at lower prices, despite reduced pork production.

Table 50--Federally inspected hog slaughter

Week ended	1986	1987	1988	1989
Thousands				
Jan. 7	1,675	1,683	1,726	1,416
14	1,654	1,659	1,766	1,721
21	1,563	1,527	1,605	1,681
28	1,506	1,500	1,543	1,644
Feb. 4	1,526	1,455	1,535	1,631
11	1,512	1,502	1,545	1,656
18	1,501	1,395	1,542	1,675
25	1,606	1,533	1,595	1,665
Mar. 4	1,635	1,556	1,610	1,619
11	1,650	1,578	1,674	1,716
18	1,556	1,574	1,639	1,702
25	1,579	1,504	1,631	1,601
Apr. 1	1,518	1,529	1,599	1,648
8	1,633	1,553	1,573	1,761
15	1,651	1,468	1,655	1,767
22	1,619	1,393	1,660	1,813
29	1,637	1,453	1,695	1,764
May 6	1,607	1,475	1,654	
13	1,560	1,440	1,634	
20	1,518	1,448	1,577	
27	1,310	1,232	1,533	
June 3	1,471	1,385	1,323	
10	1,459	1,372	1,489	
17	1,373	1,341	1,513	
24	1,330	1,356	1,503	
July 1	1,118	1,193	1,537	
8	1,390	1,360	1,330	
15	1,349	1,345	1,537	
22	1,281	1,354	1,542	
29	1,314	1,334	1,456	
Aug. 5	1,338	1,372	1,528	
12	1,368	1,445	1,571	
19	1,402	1,404	1,513	
26	1,419	1,475	1,563	
Sept. 2	1,257	1,548	1,607	
9	1,492	1,363	1,517	
16	1,504	1,671	1,807	
23	1,504	1,621	1,868	
30	1,521	1,658	1,803	
Oct. 7	1,555	1,640	1,830	
14	1,528	1,720	1,838	
21	1,551	1,664	1,845	
28	1,580	1,763	1,895	
Nov. 4	1,576	1,792	1,908	
11	1,537	1,778	1,827	
18	1,557	1,772	1,920	
25	1,308	1,463	1,562	
Dec. 2	1,530	1,845	1,956	
9	1,548	1,879	1,887	
16	1,503	1,729	1,800	
23	1,070	1,150	1,668	
30	1,258	1,458	1,420	

1/ Corresponding dates to 1989: 1986, Jan. 11, 1987, Jan. 10, 1988, Jan. 9.

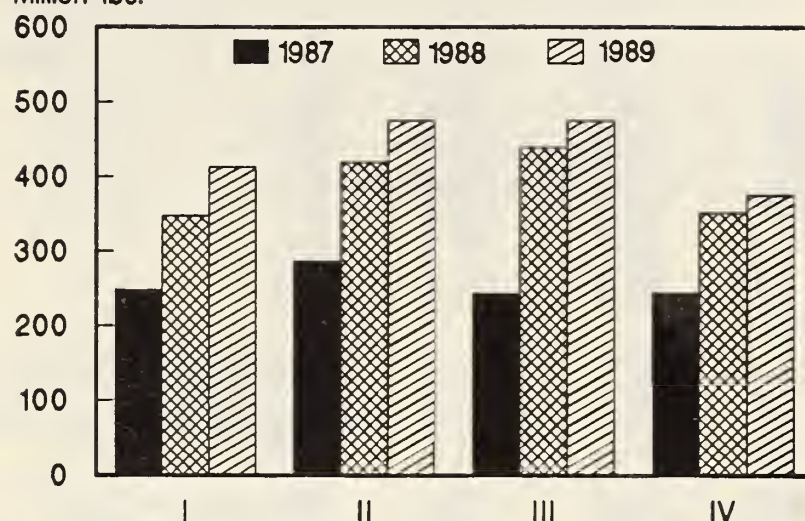
The individual pork products most likely to be influenced by large cold storage stocks this summer include: pork bellies (bacon); byproducts (pet food); trimmings (lunchmeat, sausage, and other processed pork); and spareribs. To the extent that prices of these products are weakened by large freezer stocks, hog prices will be pressured as well.

Barrow and gilt prices should decline seasonally into the fourth quarter, but the decline could be relatively small. Prices are expected to hold above the depressed levels of the previous year, and could average near \$40 per cwt for the

Figure 10

Frozen Pork Stocks

Million lbs.



Carcass weight equivalent.

quarter. Commercial pork production is projected to be 3 percent below a year earlier, as indicated by a 3-percent decline in March-May farrowing intentions. The reduction in pork supplies is expected to support wholesale pork prices in the fourth quarter, while changes in supplies of competing meats may offset each other. Beef supplies likely will be smaller than in 1988, but broiler and turkey supplies may be larger.

The spread between hog prices and carcass cutout values could be significantly narrower this fall than in the past 2 years. The hog-to-cutout spread is an indication of packer margins, and it typically widens in the fall as hog supplies increase relative to slaughter capacity. In turn, the widening of the hog-to-cutout spread contributes to seasonal weakness in hog prices. In 1989, slaughter capacity appears to be rising slightly, while hog supplies are likely approaching a cyclical downturn. Thus, fourth-quarter hog prices could be strengthened not only by higher wholesale pork prices, but also by tighter packer margins.

Retail pork prices averaged \$1.80 per pound in first-quarter 1989, down 4 cents from a year earlier. At the same time, the wholesale-to-retail price spread rose to 87 cents per pound, the highest quarterly average on record. One explanation for the wide price spread may be that retailers raised margins in pork products to offset thin margins in other meat and poultry products. If so, then spreads may remain relatively wide until margins in other products improve. Still, retail pork prices likely will remain below a year earlier at least through the current quarter.

As wholesale pork prices rise above 1988 levels in the second half of the year, retail prices likely will follow suit. Thus, a moderate increase in retail prices is expected by the fourth quarter. For all of 1989, prices may average \$1.79-\$1.83 per pound, compared with \$1.84 in 1988.

Table 51--Pork: Retail, wholesale, and farm values, spreads, and farmers' share

Year	Retail price 1/	Wholesale value 2/	Gross farm value 3/	By-product allowance 4/	Net farm value 5/	Farm retail spread			Farmers' share 6/
						Total	Wholesale-retail	Farm-wholesale	
Cents per pound									
1982	175.4	121.8	94.3	6.3	88.0	87.4	53.6	33.8	50
1983	169.8	108.9	81.4	4.9	76.5	93.3	60.9	32.4	45
1984	162.0	110.1	83.3	5.9	77.4	84.6	51.9	32.7	48
1985	162.0	101.1	76.2	4.8	71.4	90.6	60.9	29.7	44
1986	178.4	110.9	87.3	4.9	82.4	96.0	67.5	28.5	46
1987	188.4	113.0	87.9	5.2	82.7	105.7	75.4	30.3	44
I	185.0	103.8	81.8	5.0	76.8	108.2	81.2	27.0	41
II	183.4	116.6	95.6	5.5	90.1	93.3	66.8	26.5	49
III	195.5	124.3	100.3	5.9	94.4	101.1	71.2	29.9	48
IV	189.7	107.4	74.0	4.3	69.7	120.0	82.3	37.7	37
1988									
I	183.9	104.3	76.4	4.6	71.8	112.1	79.6	32.5	39
II	184.8	105.1	78.0	4.6	73.4	111.4	79.7	31.7	40
III	185.9	99.5	75.0	4.6	70.4	115.5	86.4	29.1	38
IV	179.0	95.3	66.2	4.0	62.2	116.8	83.7	33.1	35
Year	183.4	101.0	73.8	4.6	69.4	114.0	82.4	31.6	38
1989									
Jan.	181.1	94.3	71.1	4.4	66.7	114.4	86.8	27.6	37
Feb.	179.3	92.7	69.5	4.3	65.2	114.1	86.6	27.5	36
Mar.	179.7	91.8	67.5	4.2	63.3	116.4	87.9	28.5	35
I	180.0	92.9	69.4	4.3	65.1	114.9	87.1	27.8	36

1/ Estimated weighted-average of BLS prices of retail cuts from pork carcass. 2/ Value of wholesale quantity equivalent to 1 lb of retail cuts. A wholesale-carcass equivalent of 1.06 is used. 3/ Market values to producer for 1.7 lb of live animal, equivalent to 1 lb of retail cuts. 4/ Portion of gross farm value attributable to edible and inedible by-products. 5/ Gross farm value minus by-product allowance. 6/ Percent net farm value is of retail price.

U.S. Pork Trade

U.S. Pork Imports Lower, but Hog Imports Up

U.S. pork imports for the first 2 months of 1989 equaled 166 million pounds carcass weight, about 15 percent lower than for the same period last year. The United States imported less pork from of its all major suppliers except Poland. Imports from Canada and Denmark, the largest suppliers to the U.S. market, declined 10 and 35 percent, respectively; in neither case was this decline unexpected. The reduction in the countervailing duty on Canadian live hog exports boosted these exports at the expense of pork. In January and February, imports of Canadian hogs increased 160 percent to slightly more than 260,000 head, while pork imports declined to just under 88 million pounds.

Danish exports to the United States declined for a number of reasons. EC pork production was reduced in 1988, and is expected to decline by about 5 percent this year. Increased demand by both EC and Japanese markets have bid available export supply away from the United States. In addition, lower U.S. prices and the continued strength of the dollar relative to the krone have made Danish pork less competitive in the U.S. market. Consequently, for the first 2 months of 1989, imports of Danish pork declined to 35 million pounds.

Led by lower Canadian and Danish shipments, pork imports for the year should decline to just over 1 billion pounds. Canadian production is expected to be about 2 percent lower, because reduced hog prices in late 1988 and early 1989 encouraged herd liquidation during that period.

Table 52--U.S. pork trade, carcass weight 1/

Country or area	Annual 1988	January-February		
		1988	1989	Percent change
	Million pounds			Percent
Imports				
Canada	508.8	97.2	88.0	-9.5
Denmark	326.5	53.7	35.1	-34.6
Poland	128.6	18.6	22.2	19.6
Hungary	44.2	6.3	4.0	-36.2
Other	129.1	18.8	16.1	-14.3
Total	1,137.2	194.6	165.5	-15.0
Exports				
Japan	121.2	10.4	18.8	81.3
Canada	8.8	.9	1.7	88.9
Mexico	34.9	1.0	12.1	109.8
Caribbean	10.8	1.2	1.7	38.8
Other	19.5	2.4	3.8	56.2
Total	195.2	15.9	38.0	139.0

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

Table 53--U.S. live hogs trade 1/

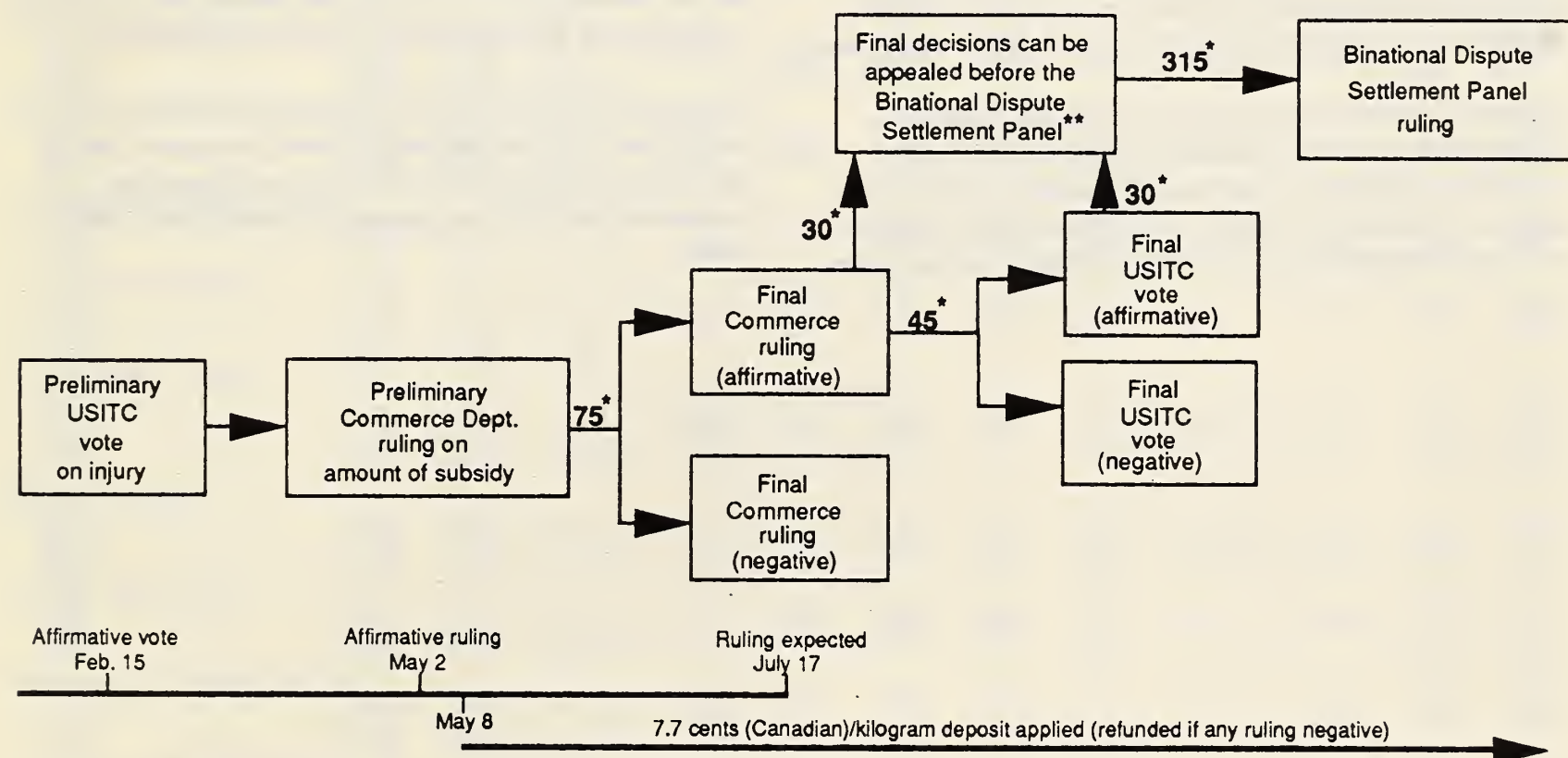
Country or area	Annual 1988	January-February		
		1988	1989	Percent Change
		1,000 head		Percent
Imports				
Mexico	.6	--	--	--
Canada	835.1	102.7	266.0	159.0
Total	835.9	102.7	266.0	159.0
Exports				
Venezuela	2.5	.5	3.0	431.6
Mexico	84.4	.1	57.2	54,933.7
Other	4.3	.2	.7	240.5
Total	91.3	.9	60.9	6,873.2

1/ May not add due to rounding. Percent change calculated from unrounded data.

In addition, on May 2 the U.S. Commerce Department issued a preliminary ruling that Canadian exports of fresh, chilled, and frozen pork to the United States are subsidized. Since the publication of this ruling in the Federal Register on May 8, a bond of 7.7 Canadian cents per kilogram (about 3 U.S. cents per pound) has been levied on fresh, chilled, and frozen pork imported from Canada. Pending a final ruling by both the Commerce Department and the U.S. International Trade Commission (USITC), the proceeds of the bond will be placed in an escrow account. The Commerce Department

is expected to issue its final ruling on July 17, and the USITC will hold a final vote on injury within 45 days of that Commerce Department ruling. If either agency issues a negative ruling, the bond will be refunded; otherwise, the countervailing duty will be retroactive to May 8 and the bond forfeited. Although countervailing duties are permitted under the U.S.-Canadian FTA, any countervailing duty decision can be appealed to either the Binational Dispute Settlement Panel or to the General Agreement on Tariffs and Trade (GATT).

Timetable for Countervailing Duty Investigation on Fresh, Chilled, and Frozen Pork from Canada



* Number of days.

** Final decisions can be appealed to either the Binational Panel or GATT (but not both)

While the Canadian Government is considering an appeal to GATT, the Canadian Pork Council has indicated that, in the event of a final ruling upholding the duty, it will request an appeal to the Binational Dispute Settlement Panel. Under the terms of the FTA, a final determination of duty or injury by either the United States or Canada can be appealed to a dispute settlement panel by the aggrieved government within 30 days. This panel is made up of five members, two chosen by each side and one chosen by mutual agreement. The panel operates much like a court of law. It will accept briefs and hear arguments by both parties, and then formally rule whether the countervailing duty law of the country was correctly applied. The decision must be rendered within 315

days from the date of complaint. Since final determinations of both injury (USITC) and subsidy (Commerce) can be challenged, it is possible that two cases will be filed. Under these circumstances, a joint panel will investigate both complaints, and hand down a ruling covering both issues, within 315 days of the latter complaint.

Although several more steps must be followed before the duty is accepted or rejected, the imposition of a bond should reinforce the existing shift toward imports of Canadian hogs. If the duty is negated and the bond returned, the rate of shift towards hogs could be slowed; however, Canadian pork imports will probably remain below year ago levels.

High EC hog prices have encouraged Danish producers to retain breeding animals in early 1989, which could translate into greater meat production later in the year. However, export conditions similar to those of 1988 exist this year. EC pork production should continue declining through the rest of the year, and Japan now leads the United States as the largest market for Danish pork. If these markets remain strong, U.S. prices remain low, and there is no change in Danish export restitutions, Danish exports to the United States will be equal to or slightly below year-ago levels.

Pork Exports Below 1988 Levels

U.S. pork exports remained strong in the first 2 months of 1989. Buoyed by strong demand in both Japan and Mexico, pork exports for the period equaled 38 million pounds, 139 percent above the same period last year. Exports to Japan reached almost 19 million pounds, 81 percent above last year.

However, several factors should be examined before concluding that exports have recovered from the lows of the mid-1980's. Exports to Mexico remain tied to political considerations, and could conceivably be dramatically reduced or cut off if the Mexican Government alters its current policy

of keeping food prices affordable. Japanese pork demand is still strong, but Denmark and Taiwan continue to dominate this market. Although Japan announced a reduction in the stabilization bands for fiscal year 1989 (April-March) and in the tariff on imported pork, the amount of reduction in the stabilization price (2.5 percent) was about one-third less than expected, and the tariff remained unchanged.

In addition, for the past 2 years Japan has been testing 10 percent of all meat for chemical residues during the first 3 months of the calendar year. During these tests, a shipment of pork from a U.S. packer was found to be contaminated with excessive levels of sulfamethazine. As a result, Japan is reportedly continuing its tests of 10 percent of U.S. pork for an additional 2-3 months, and testing 100 percent of shipments from that packer. If additional samples are found, this could damage the reputation of U.S. pork and hurt sales.

Nonetheless, pork exports are expected to remain strong, although not as high as last year. Given the uncertainties in the market, exports for 1989 are forecast to equal approximately 165 million pounds, 15 percent below 1988 levels.

Table 54--Average retail price per pound of specified meat cuts

Year and item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Dollars												
Choice Beef:												
Ground chuck												
1987	1.69	1.65	1.68	1.70	1.70	1.71	1.71	1.72	1.72	1.71	1.74	1.75
1988	1.74	1.74	1.75	1.74	1.74	1.77	1.75	1.74	1.77	1.78	1.81	1.79
1989	1.81	1.80	1.85									
Ground beef												
1987	1.30	1.27	1.28	1.29	1.32	1.30	1.31	1.32	1.32	1.33	1.35	1.32
1988	1.31	1.32	1.34	1.34	1.36	1.39	1.37	1.37	1.37	1.39	1.41	1.40
1989	1.40	1.37	1.43									
Chuck roast, bone in												
1987	1.68	1.64	1.63	1.70	1.65	1.71	1.70	1.66	1.67	1.72	1.71	1.66
1988	1.64	1.74	1.69	1.72	1.80	1.78	1.70	1.67	1.74	1.74	1.74	1.80
1989	1.81	1.91	1.87									
Round roast, boneless												
1987	2.54	2.47	2.49	2.45	2.59	2.56	2.50	2.51	2.57	2.58	2.58	2.56
1988	2.56	2.61	2.67	2.60	2.61	2.66	2.63	2.64	2.64	2.60	2.68	2.68
1989	2.75	2.75	2.76									
Rib roast, bone in												
1987	3.44	3.44	3.37	3.29	3.48	3.64	3.69	3.67	3.60	3.63	3.64	3.57
1988	3.57	3.59	3.66	3.75	3.72	3.93	4.02	4.04	4.12	4.12	4.10	4.03
1989	4.11	4.04	4.06									
Round steak, boneless												
1987	2.80	2.80	2.76	2.81	2.94	2.96	2.91	2.93	2.92	2.96	2.92	2.93
1988	2.88	2.94	2.94	3.01	3.00	3.05	2.99	2.99	3.04	2.98	3.00	3.01
1989	3.07	3.09	3.12									
Sirloin steak, bone in												
1987	2.81	2.96	2.87	3.02	3.22	3.44	3.36	3.23	3.26	3.12	3.15	3.16
1988	2.99	3.04	3.12	3.18	3.35	3.49	3.54	3.39	3.45	3.30	3.36	3.23
1989	3.39	3.40	3.61									
Chuck steak, bone in 1/												
1987	1.71	1.65	1.64	1.69	1.59	1.62	1.62	1.61	1.61	1.61	1.62	1.62
1988	1.61	1.62	1.64	1.65	1.67	1.71	1.70	1.69	1.70	1.70	1.72	1.71
1989	1.74	1.74	1.78									
T-Bone steak, bone in												
1987	3.86	3.79	3.83	4.01	4.33	4.64	4.77	4.45	4.37	4.31	4.29	4.27
1988	4.31	4.27	4.33	4.43	4.54	4.90	5.18	5.20	4.86	4.84	4.83	4.97
1989	4.95	4.91	5.05									
Porterhouse steak, 1/												
bone in												
1987	4.22	4.19	4.22	4.26	4.36	4.44	4.44	4.42	4.39	4.40	4.44	4.43
1988	4.40	4.43	4.48	4.51	4.56	4.66	4.63	4.60	4.64	4.64	4.68	4.68
1989	4.74	4.76	4.86									
Pork:												
Bacon, sliced												
1987	2.12	2.09	2.10	2.08	2.11	2.13	2.23	2.28	2.28	2.19	2.07	2.02
1988	1.95	1.94	1.92	1.91	1.90	1.90	1.91	1.88	1.84	1.86	1.80	1.79
1989	1.80	1.80	1.79									
Chops, center cut												
1987	2.72	2.70	2.64	2.74	2.78	2.97	3.01	3.00	2.98	2.92	2.74	2.67
1988	2.66	2.72	2.68	2.71	2.78	2.93	2.90	2.87	2.90	2.77	2.67	2.65
1989	2.78	2.75	2.80									
Ham, rump or shank half 1/												
1987	1.60	1.59	1.50	1.36	1.44	1.50	1.52	1.56	1.58	1.62	1.65	1.60
1988	1.63	1.57	1.60	1.58	1.58	1.62	1.62	1.62	1.61	1.59	1.56	1.55
1989	1.58	1.57	1.57									
Sirloin roast, bone in 1/												
1987	1.90	1.82	1.81	1.89	1.92	1.95	2.02	2.04	2.05	2.01	1.95	1.91
1988	1.92	1.90	1.90	1.88	1.89	1.94	1.93	1.93	1.92	1.89	1.86	1.85
1989	1.88	1.88	1.88									
Shoulder picnic, bone in												
1987	1.15	1.10	1.06	1.03	1.08	1.03	1.11	1.14	1.16	1.19	1.16	1.16
1988	1.14	1.13	1.14	1.12	1.09	1.15	1.13	1.11	1.11	1.10	1.12	1.10
1989	1.12	1.06	1.06									
Sausage, fresh, pork,												
loose												
1987	2.01	2.02	1.99	1.97	1.98	1.94	2.00	2.02	2.01	1.92	1.97	1.99
1988	2.05	1.97	1.99	2.02	2.02	1.95	1.99	1.94	1.95	1.90	1.89	1.92
1989	1.92	1.94	1.92									
Miscellaneous cuts:												
Ham, canned, 3 or 5 lb												
1987	2.84	2.85	2.83	2.77	2.74	2.76	2.83	2.84	2.83	2.85	2.78	2.72
1988	2.77	2.75	2.71	2.73	2.74	2.73	2.77	2.73	2.74	2.74	2.69	2.60
1989	2.75	2.71	2.63									
Frankfurters, all meat												
1987	1.98	1.99	1.96	1.98	1.96	2.00	1.91	2.01	1.98	2.04	2.04	2.02
1988	2.02	2.04	2.05	2.01	2.02	2.02	2.01	2.02	2.00	2.02	2.03	2.04
1989	2.08	2.07	2.07									
Bologna												
1987	2.22	2.17	2.19	2.15	2.14	2.15	2.21	2.21	2.21	2.20	2.21	2.24
1988	2.24	2.23	2.23	2.20	2.18	2.24	2.26	2.29	2.25	2.27	2.28	2.24
1989	2.22	2.24	2.23									
Beef liver												
1987	1.02	1.00	1.03	1.02	1.04	1.03	1.03	1.03	1.03	1.05	1.02	1.03
1988	1.01	1.01	1.02	1.04	1.04	1.06	1.06	1.04	1.06	.99	NA	NA
1989	NA	NA	NA									

1/ While these specific cut prices are no longer available from the Bureau of Labor Statistics (BLS), ERS uses the BLS index and historical data to estimate these prices monthly.

Source: Bureau of Labor Statistics.

Table 55--Red meat supply and utilization, carcass and retail weight 1/

Year	Production		Begin- ning stocks	Im- ports	Total supply	Ex- ports	Ship- ments	Ending stocks	Total disap- pearance	Per capita		
	Commer- cial	Farm								Carcass weight	Retail weight	
-----Million pounds-----											-----Pounds-----	
Beef:												
1987												
I	5,754	56	412	543	6,764	127	14	411	6,213	25.6	18.1	
II	5,737	25	411	627	6,800	136	13	337	6,315	25.9	18.4	
III	6,064	24	337	681	7,106	159	14	381	6,552	26.8	19.0	
IV	5,850	56	381	418	6,705	183	12	386	6,125	25.0	17.8	
Year	23,405	161	412	2,269	26,247	604	52	386	25,205	103.3	73.4	
1988												
I	5,700	58	386	703	6,847	134	16	419	6,278	25.6	18.2	
II	5,784	25	419	668	6,896	155	15	332	6,394	26.0	18.5	
III	6,185	24	332	585	7,126	188	15	409	6,514	26.4	18.8	
IV	5,755	58	409	423	6,645	203	15	422	6,005	24.3	17.3	
Year	23,424	165	386	2,379	26,354	680	61	422	25,191	102.4	72.7	
1989 2/												
I	5,529	58	422	540	6,549	175	15	394	5,965	24.1	17.1	
Year	23,104	165	422	2,215	25,906	735	60	325	24,786	99.8	70.9	
Pork:												
1987												
I	3,540	22	248	290	4,100	19	31	289	3,762	15.5	14.6	
II	3,327	9	289	296	3,921	27	28	245	3,620	14.9	14.1	
III	3,384	9	245	299	3,938	21	33	244	3,639	14.9	14.1	
IV	4,061	22	244	310	4,637	42	32	347	4,216	17.2	16.3	
Year	14,312	62	248	1,195	15,817	109	124	347	15,237	62.5	59.1	
1988												
I	3,790	22	347	310	4,469	25	30	419	3,995	16.3	15.4	
II	3,727	9	419	287	4,442	60	35	439	3,908	15.9	15.0	
III	3,775	8	439	274	4,496	51	35	352	4,058	16.5	15.6	
IV	4,331	22	352	266	4,971	59	35	413	4,464	18.1	17.1	
Year	15,623	61	347	1,137	17,168	195	135	413	16,425	66.7	63.1	
1989 2/												
I	3,887	22	413	1,225	4,577	60	35	473	4,009	16.2	15.4	
Year	15,587	61	413	1,025	17,086	165	140	400	16,381	66.0	62.5	
Veal:												
1987												
I	112	5	7	6	130	2	0	6	122	0.5	0.4	
II	101	1	6	4	112	2	0	4	106	0.4	0.4	
III	99	2	4	6	111	1	0	4	107	0.4	0.4	
IV	104	5	4	8	121	2	0	4	115	0.5	0.4	
Year	416	13	7	24	460	7	1	4	449	1.8	1.5	
1988												
I	97	4	4	9	114	2	0	5	107	0.4	0.4	
II	92	1	5	4	102	2	0	4	96	0.4	0.3	
III	99	1	4	6	110	3	0	3	104	0.4	0.4	
IV	99	3	3	8	113	3	1	5	104	0.4	0.3	
Year	387	9	4	27	427	10	1	5	411	1.7	1.4	
1989 2/												
I	91	4	5	0 3/	100	0	0	7	93	0.4	0.3	
Year	381	19	5	0	395	0	1	4	390	1.6	1.3	
Lamb and Mutton:												
1987												
I	76	2	13	13	104	0	1	14	89	0.4	0.3	
II	75	1	14	12	101	0	1	12	88	0.4	0.3	
III	77	1	12	9	99	0	1	7	91	0.4	0.3	
IV	81	2	7	11	101	1	0	8	92	0.4	0.3	
Year	309	6	13	44	372	1	2	8	360	1.5	1.3	
1988												
I	85	2	8	19	114	0	0	7	107	0.4	0.4	
II	80	1	7	15	103	0	1	9	93	0.4	0.3	
III	80	1	9	8	98	0	0	7	91	0.4	0.3	
IV	84	2	7	9	102	1	0	6	95	0.4	0.3	
Year	329	6	8	51	394	1	1	6	386	1.6	1.4	
1989 2/												
I	87	2	6	18	113	0	0	7	106	0.4	0.4	
Year	330	6	6	55	397	1	0	7	389	1.6	1.4	
Total red meat:												
1987												
I	9,482	85	680	851	11,098	148	45	719	10,186	41.9	33.5	
II	9,240	36	719	939	10,934	165	42	599	10,128	41.6	33.2	
III	9,624	36	599	995	11,254	182	48	635	10,389	42.5	33.8	
IV	10,096	85	635	748	11,564	227	45	745	10,548	43.1	34.8	
Year	38,442	242	680	3,533	42,897	722	179	745	41,251	169.1	135.3	
1988												
I	9,672	86	745	1,041	11,543	161	46	850	10,486	42.7	34.3	
II	9,683	36	850	974	11,543	217	51	784	10,491	42.7	34.2	
III	10,139	34	784	873	11,830	242	50	771	10,767	43.7	35.0	
IV	10,269	85	771	706	11,831	266	51	846	10,668	43.2	35.0	
Year	39,763	241	745	3,594	44,343	886	198	846	42,413	172.3	138.6	
1989 2/												
I	9,594	86	846	813	11,339	235	50	881	10,173	41.1	33.2	
Year	39,402	241	846	3,295	43,784	901	201	736	41,946	168.9	136.1	

1/ May not add due to rounding. 2/ Forecast. 3/ Beginning in 1989 veal trade no longer reported separately.

Table 56--Poultry supply and utilization

Year	Slaughter			Begin- ning stocks	Total supply	Ex- ports	Ship- ments	Ending stocks	Total dis- appearance	Per capita Retail weight
	Feder- ally Inspected	Other	Total							
	----- Million pounds -----									
Pounds										
Young chicken:										
1987										
I	3,735	27	3,762	24	3,786	142	39	25	3,579	14.7
II	3,907	26	3,933	25	3,958	198	32	24	3,704	15.2
III	3,966	17	3,984	24	4,008	223	40	28	3,717	15.2
IV	3,895	21	3,916	28	3,944	188	40	25	3,691	15.1
Year	15,502	92	15,594	24	15,618	752	151	25	14,691	60.2
1988										
I	3,996	18	4,015	25	4,040	163	38	36	3,803	15.5
II	4,079	19	4,098	36	4,134	190	38	41	3,864	15.7
III	4,035	5	4,039	40	4,085	198	37	32	3,813	15.5
IV	4,015	13	4,028	32	4,060	214	38	36	3,772	15.3
Year	16,124	56	16,180	25	16,205	765	151	36	15,253	62.0
1989										
I	4,127	12	4,139	36	4,175	185	35	32	3,923	15.9
Year 2/	16,877	56	16,933	36	16,969	750	140	30	16,049	64.6
Other chicken:										
1987										
I	133	24	157	163	320	5	1	172	143	0.6
II	155	28	183	172	355	6	1	182	167	0.7
III	129	23	152	182	333	3	0	166	165	0.7
IV	135	24	158	166	324	2	1	188	133	0.5
Year	552	98	650	163	814	15	2	188	608	2.5
1988										
I	153	28	181	188	369	6	1	197	165	0.7
II	150	27	177	197	374	4	1	161	208	0.8
III	112	20	132	161	293	7	1	147	138	0.6
IV	125	23	148	147	295	9	1	157	129	0.5
Year	540	97	638	188	826	26	3	157	641	2.6
1989										
I	137	25	161	157	318	5	1	146	166	0.7
Year 2/	532	96	628	157	784	19	4	150	611	2.5
Total chicken:										
1987										
I	3,868	51	3,919	187	4,106	147	40	197	3,722	15.3
II	4,062	54	4,116	197	4,313	204	32	206	3,871	15.9
III	4,095	41	4,135	206	4,341	226	40	194	3,881	15.9
IV	4,030	44	4,074	194	4,268	191	41	213	3,824	15.6
Year	16,054	190	16,245	187	16,432	767	153	213	15,298	62.8
1988										
I	4,149	46	4,196	213	4,409	169	39	233	3,968	16.5
II	4,229	46	4,275	232	4,508	194	39	202	4,072	16.6
III	4,147	25	4,171	202	4,378	205	38	179	3,951	16.1
IV	4,140	36	4,176	179	4,355	223	39	193	3,901	15.8
Year	16,665	153	16,818	213	17,031	791	153	193	15,894	64.6
1989										
I	4,264	37	4,300	193	4,493	190	36	178	4,089	16.6
Year 2/	17,409	152	17,561	193	17,753	769	144	180	16,660	67.1
Turkey:										
1987										
I	670	19	689	178	867	6	0	226	635	2.6
II	865	26	891	226	1,117	7	0	382	728	3.0
III	1,100	32	1,132	382	1,514	7	0	641	866	3.5
IV	1,082	34	1,116	641	1,756	13	3	282	1,458	6.0
Year	3,717	111	3,828	178	4,006	33	4	282	3,686	15.1
1988										
I	837	10	846	282	1,128	13	1	339	776	3.2
II	981	4	985	339	1,324	11	0	457	855	3.5
III	1,066	19	1,084	457	1,541	15	0	573	952	3.9
IV	1,040	12	1,053	573	1,626	11	1	250	1,364	5.5
Year	3,923	45	3,968	282	4,250	51	2	250	3,948	16.0
1989										
I	802	8	810	250	1,060	8	1	267	784	3.2
Year 2/	4,002	45	4,047	250	4,296	38	4	175	4,079	16.4
Total poultry:										
1987										
I	4,538	70	4,608	365	4,973	153	40	423	4,357	17.9
II	4,927	80	5,007	423	5,430	211	32	588	4,599	18.9
III	5,195	73	5,268	588	5,855	232	41	835	4,747	19.5
IV	5,112	78	5,190	835	6,025	204	44	495	5,282	21.6
Year	19,772	301	20,072	365	20,437	800	157	495	18,985	77.8
1988										
I	4,986	56	5,042	495	5,537	182	39	571	4,744	19.3
II	5,210	60	5,260	571	5,831	206	39	659	4,928	20.0
III	5,213	44	5,255	659	5,914	220	38	752	4,903	19.9
IV	5,180	48	5,229	752	5,981	235	39	442	5,266	21.3
Year	20,587	198	20,786	495	21,281	843	156	442	19,841	80.6
1989										
I	5,066	65	5,110	442	5,552	198	37	445	4,872	19.7
Year 2/	21,411	197	21,608	442	22,050	807	148	355	20,740	83.5

1/ May not add due to rounding. 2/ Forecast.

Table 57--Total red meat and poultry supply and utilization, carcass and retail weight 1/

Year	Total production	Beginning stocks	Imports	Total supply	Exports	Shipments	Ending stocks	Total disappearance	Per capita	
									Carcass weight	Retail weight
-----Million pounds-----									-----Pounds-----	
Total red meat and poultry:										
1987										
I	14,175	1,045	851	16,071	301	85	1,142	14,543	59.8	51.4
II	14,283	1,142	939	16,364	376	74	1,187	14,727	60.5	52.1
III	14,928	1,187	995	17,109	414	89	1,470	15,136	62.0	53.3
IV	15,371	1,470	748	17,589	431	89	1,240	15,830	64.7	56.4
Year	58,756	1,045	3,533	63,334	1,522	336	1,240	60,236	246.9	213.1
1988										
I	14,799	1,240	1,041	17,080	343	85	1,421	15,230	62.1	53.7
II	14,978	1,421	974	17,374	423	90	1,443	15,418	62.7	54.2
III	15,428	1,443	873	17,744	462	88	1,523	15,670	63.6	54.9
IV	15,580	1,523	706	17,812	501	90	1,288	15,933	64.5	56.4
Year	60,790	1,240	3,594	65,624	1,729	354	1,288	62,254	252.9	219.2
1989 2/										
I	14,790	1,288	813	16,891	433	87	1,326	15,045	60.8	52.8
Year	61,251	1,288	3,295	65,834	1,708	349	1,091	62,686	252.4	219.6

1/ May not add due to rounding. 2/ Forecast.

Table 58--Egg supply and utilization (population includes military) 1/

Year	Pro- duction	Beginning stocks	Breaking egg use	Imports 2/	Total supply	Exports	Ship- ments	Hatching egg use 3/	Ending stocks	Consumption Total	Per capita
-----Million dozen-----											
Total eggs											
1987											
I	1,441.2	10.4	---	2.6	1,454.1	23.6	7.3	147.6	11.9	1,263.8	62.4
II	1,439.3	11.9	---	1.2	1,452.5	23.7	4.8	154.9	13.8	1,255.3	61.9
III	1,439.5	13.8	---	1.0	1,454.3	21.5	6.1	149.2	13.5	1,264.0	62.1
IV	1,482.3	13.5	---	0.8	1,496.6	42.4	6.9	147.4	14.4	1,285.4	63.0
Year	5,802.3	10.4	---	5.6	5,818.3	111.2	25.1	599.1	14.4	5,068.4	249.4
1988											
I	1,476.3	14.4	---	0.9	1,491.5	33.7	6.0	150.2	11.7	1,290.0	63.1
II	1,428.3	11.7	---	0.7	1,440.7	34.1	6.4	153.5	20.1	1,226.6	59.9
III	1,420.6	20.1	---	2.1	1,442.9	33.4	6.4	150.5	17.6	1,235.0	60.1
IV	1,445.9	17.5	---	1.6	1,465.1	40.6	7.3	150.0	15.2	1,252.0	60.9
Year	5,771.1	14.4	---	5.3	5,790.8	141.8	26.0	604.3	15.2	5,003.5	244.0
1989											
I	1,389.0	15.2	---	1.9	1,406.0	23.7	5.6	160.2	11.7	1,216.5	55.7
Shell eggs											
1987											
I	1,441.2	0.7	225.3	1.9	1,218.5	7.1	7.3	147.6	1.0	1,055.6	52.1
II	1,439.3	1.0	237.0	0.1	1,203.5	8.9	4.8	154.9	1.0	1,033.8	51.0
III	1,439.5	1.0	242.8	0.1	1,197.8	8.3	6.1	149.2	1.0	1,033.2	50.8
IV	1,482.3	1.0	235.0	0.1	1,248.4	24.3	6.9	147.4	1.3	1,068.4	52.3
Year	5,802.3	0.7	940.1	2.3	4,865.1	48.6	25.1	599.1	1.3	4,191.1	206.2
1988											
I	1,476.3	1.3	231.8	0.1	1,245.8	16.0	6.0	150.2	1.0	1,072.6	52.5
II	1,428.3	2.0	260.2	0.1	1,169.3	12.0	6.4	153.5	0.9	996.4	48.6
III	1,420.6	0.9	249.6	1.1	1,172.9	15.7	6.4	150.5	0.7	999.7	48.7
IV	1,445.9	0.7	234.7	1.0	1,212.9	23.2	7.3	150.0	0.3	1,032.1	50.1
Year	5,771.1	1.3	976.4	2.3	4,800.9	67.0	26.0	604.3	0.3	4,103.3	200.1
1989											
I	1,389.0	0.3	219.6	1.4	1,171.0	9.1	5.6	160.2	.48	995.6	48.3

1/ Totals may not add due to rounding. 2/ Shell eggs and approximate shell-egg equivalent of egg products. Hatching for 1986-present calculated by the new method. 4/ Preliminary.

3/Not applicable for total egg supply and utilization.

Table 59--Selected price statistics for meat animals and meat, 1988-89

Item	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Dollars per cwt												
Slaughter Steers:												
Omaha												
Choice, 1000-1100 lb	75.15	70.58	65.96	67.08	67.71	69.13	70.07	71.21	72.35	72.92	75.81	75.31
Select, 1000-1100 lb	72.86	67.57	63.58	64.88	64.76	65.88	67.30	68.71	70.04	70.94	73.48	73.17
California												
Choice, 1000-1100 lb	74.00	69.73	67.38	70.75	70.06	71.31	71.95	70.94	72.63	74.56	76.63	74.57
Colorado												
Choice, 1100-1300 lb	75.93	70.78	66.72	69.75	69.56	71.81	73.17	73.10	73.73	74.82	78.51	77.77
Texas												
Choice, 1000-1100 lb	76.06	71.31	66.88	70.08	69.96	72.62	73.52	73.64	74.40	75.40	78.87	77.51
Slaughter heifers:												
Omaha												
Choice, 1000-1200 lb	74.88	69.90	65.41	67.24	68.10	69.12	70.31	71.23	72.48	73.19	76.44	76.57
Select, 900-1000 lb	70.71	65.65	61.54	63.15	63.18	64.15	65.88	66.81	68.46	69.54	73.35	72.98
Cows:												
Omaha												
Commercial	49.33	42.70	44.69	46.40	46.54	46.46	41.28	44.25	44.61	47.04	45.56	44.75
Breaking Utility	48.79	42.68	45.39	47.33	48.42	47.71	42.10	45.14	44.88	46.92	45.89	45.19
Boning Utility	49.16	43.68	46.60	48.57	49.50	49.21	45.72	45.92	47.11	51.29	47.73	47.58
Canner	42.31	38.16	40.24	40.00	41.08	41.42	38.48	39.83	40.86	45.04	42.10	40.42
Cutter	47.69	42.49	43.95	43.73	45.33	45.75	43.20	44.73	45.63	49.96	46.57	44.67
Vealers: 7/												
Choice, So. St. Paul	97.66	100.88	77.50	87.50	240.42	213.75	230.88	225.63	229.63	225.06	257.50	269.06
Feeder steers: 1/												
Kansas City												
Medium No. 1,												
400-500 lb	94.50	90.50	85.75	ng	95.88	95.63	92.60	93.38	96.88	99.33	104.60	98.50
600-700 lb	82.88	77.38	79.08	84.65	84.00	85.81	83.90	86.13	86.00	85.56	84.45	82.63
All weights and grades	78.99	70.77	74.14	79.45	79.89	82.99	81.31	80.99	82.02	82.91	80.98	78.58
Okla. City												
Medium No. 1												
400-500 lb	102.33	93.98	95.89	99.74	97.75	100.55	102.05	101.64	104.30	106.35	107.50	101.94
600-700	85.67	78.59	80.69	86.21	83.97	85.32	86.41	88.10	87.98	87.86	85.98	84.11
700-800	79.90	74.83	77.77	81.79	81.30	82.45	83.31	85.46	84.45	84.50	80.63	76.25
Amarillo												
Medium No. 1,												
600-700 lb	81.25	75.95	77.67	82.00	82.38	82.19	81.70	82.83	86.38	85.50	82.70	79.50
Georgia Auctions												
Medium No. 1,												
600-700 lb	79.88	72.60	75.67	78.20	77.75	77.38	78.60	78.50	81.25	83.00	82.60	77.50
Medium No. 2,												
400-500 lb	85.25	76.40	81.67	82.20	81.25	81.50	81.60	81.67	86.25	88.25	89.20	84.63
Feeder heifers:												
Medium No. 1,												
Kansas City												
400-500 lb	87.63	ng	77.75	ng	85.81	86.69	83.30	82.88	86.69	87.75	89.25	85.83
600-700 lb	77.25	72.75	72.63	78.70	78.50	80.75	79.70	79.00	79.38	80.50	77.81	75.00
Okla. City												
400-500 lb.	91.44	79.86	81.77	85.59	84.29	86.02	87.49	92.02	90.10	92.08	81.78	88.03
600-700 lb.	76.71	71.75	74.68	77.96	77.04	78.36	78.99	80.22	80.92	81.31	79.35	75.53
Slaughter hogs:												
Barrows and gilts												
Omaha No. 1 & 2,												
230-240 lb	48.93	49.50	46.92	47.17	41.80	40.04	37.84	43.01	43.03	42.12	40.49	38.38
All weights	47.51	47.80	45.31	45.71	40.78	38.84	36.25	40.58	41.76	40.96	40.96	37.08
Sioux City	47.75	48.26	45.60	45.98	41.28	38.92	36.52	40.88	41.64	41.11	39.88	37.22
7 markets 2/	47.55	48.06	45.57	46.10	41.04	38.95	36.45	40.58	41.58	40.91	39.85	37.06
Sows:												
7 markets 2/	37.68	33.91	31.79	34.01	32.89	31.19	28.14	29.49	33.60	35.67	35.27	32.07
Feeder pigs:												
No. 1 & 2, So. Mo.,												
40-50 lb (per hd.)	46.85	31.40	25.57	27.40	28.30	30.95	27.99	29.17	35.25	34.18	39.55	34.73
Slaughter lambs:												
Choice, San Angelo	72.67	59.38	59.00	56.19	59.50	63.94	65.55	68.83	68.13	68.83	75.90	78.17
Choice, So. St. Paul	71.73	56.70	58.55	54.05	57.28	62.25	63.39	67.65	62.90	65.48	69.56	69.67
Ewes, Good,												
San Angelo	36.38	36.30	37.83	38.20	37.38	36.88	38.75	42.08	45.69	53.28	47.55	41.50
So. St. Paul	11.45	11.08	12.94	13.00	13.13	13.75	14.32	18.60	22.50	24.88	21.92	18.10
Feeder lambs:												
Choice, San Angelo	90.63	77.80	79.67	79.05	78.56	80.38	82.00	84.83	84.38	97.17	95.30	88.06
Choice, So. St. Paul	83.50	71.10	62.14	59.00	64.65	70.30	75.35	83.75	85.00	85.00	85.68	84.38
Farm prices:												
Beef cattle	69.30	65.00	63.20	65.90	67.20	67.10	66.70	67.20	70.60	71.50	72.00	70.10
Calves	93.40	84.90	87.70	90.90	89.00	87.80	87.80	88.60	92.80	95.90	94.00	90.70
Hogs	46.30	47.10	44.10	44.70	40.70	38.70	36.20	39.70	40.90	40.40	39.30	36.30
Sheep	26.10	23.20	25.00	25.30	25.90	25.30	27.80	29.10	34.20	34.50	30.30	29.90
Lambs	72.60	60.20	60.00	59.80	64.30	66.20	66.30	68.60	67.40	68.40	72.50	71.10

Continued--

Table 59--Selected price statistics for meat animals and meat, 1988--Continued

Item	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Dollars per cwt												
Meat prices:												
Wholesale												
Central U.S. markets												
Steer beef, Choice, 600-700 lb	111.70	106.38	97.09	101.04	103.15	104.36	104.73	106.20	107.30	107.98	112.43	113.84
Heifer beef, Choice 550-700 lb	111.20	104.92	96.28	100.37	102.82	104.62	104.49	106.22	107.39	107.90	112.36	113.63
Cow beef, Canner and Cutter	89.88	81.28	85.74	86.51	87.73	85.58	85.32	90.03	91.23	96.93	92.17	89.77
Boxed beef cut-out value	116.73	111.97	107.09	110.37	112.72	112.74	112.37	112.45	113.62	114.30	117.09	118.58
Pork loins, 14-18 lb 4/	112.75	111.31	104.96	106.88	97.92	85.33	77.87	93.61	89.35	90.97	91.77	91.59
Pork bellies, 12-14 lb	46.09	45.51	40.84	37.46	33.05	34.97	33.64	34.82	36.91	31.41	30.19	25.49
Hams, skinned, 14-17 lb	67.70	66.51	65.90	67.16	73.20	78.33	78.08	65.50	65.81	67.11	63.00	61.60
Pork cut-out value	63.76	64.69	60.59	61.21	58.34	56.10	52.88	56.97	56.11	56.18	54.87	52.96
East Coast:												
Lamb, Choice and Prime, 35-45 lb.	153.75	128.50	128.75	127.00	130.50	135.00	133.65	147.50	143.69	146.44	155.31	156.44
55-65 lb.	141.38	125.00	128.75	127.00	130.50	134.12	127.70	137.50	133.75	135.88	142.00	147.06
West Coast:												
Steer beef, Choice, 700-800 lb	117.00	114.50	99.00	nq	nq	nq	106.13	106.58	110.97	112.42	117.25	118.93
Cents per lb.												
Retail												
Beef												
Choice	253.2	259.9	259.3	257.8	259.7	257.8	260.4	260.0	264.3	265.2	269.5	
All Fresh	221.5	227.2	226.1	224.3	225.4	230.6	232.9	233.0	234.1	233.9	238.5	
Pork	183.6	187.9	187.4	185.5	184.9	181.6	178.0	177.4	181.1	179.3	179.7	
1982-84=100												
Price indexes: (BLS)												
Retail meats	111.7	113.8	113.4	113.2	113.4	113.0	113.0	112.7	114.0	114.3	115.5	
Beef and veal	111.7	114.1	113.4	112.7	113.6	113.7	114.7	114.6	116.0	116.6	119.0	
Pork	111.7	114.6	114.3	114.1	113.7	111.8	110.0	109.6	111.5	110.9	111.0	
Other meats	112.3	113.0	113.2	113.9	113.3	113.5	113.8	113.1	113.3	114.0	114.0	
Poultry	114.0	120.1	129.0	131.7	133.4	129.4	127.2	127.1	128.8	128.4	130.3	
Livestock-feed ratios,												
Omaha: 3/												
Steer-corn	38.6	27.9	24.5	26.2	26.4	26.4	28.4	27.9	28.2	28.7	29.4	30.2
Hog-corn	24.3	18.9	16.8	17.8	15.9	14.9	14.7	16.2	16.4	16.3	15.4	14.8

1/ Reflects new feeder cattle grades. 2/ St. Louis N.S.Y., Kansas City, Omaha, Sioux City, So. St. Joseph, So. St. Paul, and Indianapolis. 3/ Beef, Choice 2-3 550-700 lb. 4/ Prior to 1984, 8-14 lb; 1984 and 1985, 14-17 lb; 1986, 14-18 lb. 5/ U.S. #2, 175 lb. carcass. 6/ Bushels of No. 2 yellow corn equivalent in value to 100 pounds live weight. 7/ Beginning Sept. 10, prices reported per head.

Table 60--Selected marketings, slaughter, stocks, and trade for meat animals and meat, 1988-89

Item	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1,000 head												
Federally inspected:												
Slaughter												
Cattle	2,707	2,830	2,983	2,898	3,120	2,927	2,871	2,698	2,685	2,711	2,500	2,744
Steers	1,408	1,469	1,506	1,452	1,525	1,397	1,324	1,270	1,311	1,290	1,228	1,361
Heifers	800	827	888	901	1,011	966	934	797	790	827	786	817
Cows	449	481	533	498	527	507	555	579	537	544	445	518
Bulls and stags	50	54	56	48	57	57	57	52	47	50	41	49
Calves	169	171	204	207	227	207	197	202	203	196	175	194
Sheep and lambs	388	414	413	387	442	452	437	418	447	418	415	505
Hogs	6,929	6,713	6,715	6,199	7,101	7,534	7,887	7,909	7,703	7,116	6,619	756
Percentage sows	3.8	4.3	5.5	5.8	5.8	5.0	4.4	4.4	4.3	4.7	4.1	4.2
Pounds												
Average live wt per head												
Cattle	1,109	1,105	1,108	1,116	1,126	1,134	1,140	1,139	1,146	1,152	1,136	1,128
Calves	258	272	258	236	242	252	267	254	248	258	258	255
Sheep and lambs	128	127	125	121	120	121	123	124	126	126	127	126
Hogs	249	250	250	249	247	248	251	253	251	249	247	247
Average dressed wt												
Beef	667	665	665	670	679	683	683	677	681	686	684	675
Veal	157	165	158	146	147	154	161	154	150	156	157	155
Lamb and mutton	65	64	63	61	60	61	62	63	64	65	64	64
Pork	179	180	180	179	177	177	179	181	180	180	178	178
Million pounds												
Production												
Beef	1,798	1,874	1,976	1,934	2,111	1,993	1,954	1,818	1,822	1,852	1,705	1,844
Veal	26	28	32	29	33	31	31	30	30	30	27	30
Lamb and mutton	25	26	26	23	27	27	27	26	28	27	26	32
Pork	1,236	1,203	1,203	1,105	1,251	1,330	1,409	1,425	1,385	1,274	1,175	1,342
Commercial: 1/												
Slaughter												
Cattle	2,783	2,908	3,068	2,983	3,207	3,010	2,966	2,800	2,774	2,789	2,568	2,822
Calves	177	179	212	215	234	215	206	210	211	203	181	200
Sheep and Lambs	405	427	428	405	462	469	452	432	460	428	425	519
Hogs	7,091	6,884	6,902	6,366	7,292	7,719	8,096	8,138	7,946	7,332	6,791	7,763
Million pounds												
Production												
Beef	1,841	1,918	2,025	1,982	2,162	2,041	2,007	1,876	1,872	1,896	1,744	1,889
Veal	28	30	34	31	35	33	34	33	32	32	28	31
Lamb and mutton	26	27	27	24	28	28	28	27	29	27	27	33
Pork	1,263	1,231	1,233	1,133	1,281	1,360	1,443	1,463	1,425	1,310	1,204	1,373
Cold storage stocks: 2/												
Beef	305	275	248	270	295	308	296	300	317	315	313	296
Veal	5	5	4	4	3	3	3	5	5	7	7	7
Lamb and mutton	8	8	9	9	7	7	6	6	6	7	6	7
Pork	397	389	363	337	287	288	321	361	358	381	397	397
Total meat	759	721	671	671	634	644	654	701	716	745	762	750
Trade:												
Imports (carcass wt)												
Beef and veal 4/	220.2	194.9	256.8	186.5	231.5	172.6	155.4	163.3	112.4	226.7	161.7	
Lamb, mutton, and goat	6.0	4.9	3.5	2.6	3.1	2.4	2.8	3.3	3.4	6.3	4.5	
Pork	92.9	95.2	99.0	94.3	94.2	85.0	90.0	85.0	91.3	89.8	75.6	
Exports (carcass wt)												
Beef and veal 4/	52.7	52.0	53.4	51.2	67.4	72.2	69.1	74.9	61.5	54.3	62.4	
Lamb and mutton	.1	.1	.1	3/	.1	.1	.2	.1	.3	.2	.3	
Pork	16.0	21.5	22.5	17.6	18.3	14.6	18.1	21.6	19.7	20.2	17.8	

1/ Federally inspected and other commercial. 2/ End of month. Beginning January 1977, excludes beef and pork stocks in cooler. 3/ Less than 50,000 lb. 4/ Beginning January 1989, veal trade is no longer reported separately.

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Future Directions and Challenges in Egg Marketing

Lee A. Christensen*

Abstract: Several years of financial losses for egg producers suggest more attention should be given to marketing as well as production issues. This paper discusses changes in demographic characteristics, declining egg consumption, and some marketing strategies, which focus on the customers' perspective. Possible approaches for adjusting to changes include new product development, innovation, product differentiation, and advertising.

Keywords: Marketing, table eggs, egg products, per capita consumption, marketing, demographics, product differentiation, innovation.

Introduction

The egg industry experienced severe financial stress in 1988. The net returns series maintained by the Economic Research Service (ERS) showed the greatest losses since 1975. Financial losses forced some producers out of the egg business. While net returns are improving in 1989, the industry faces continual adjustments associated with declining consumer demand. Some firms will contract in size or quit the industry. Others will expand in anticipation of long run opportunities. Influencing the decision to leave or stay, and impacting the future structure of the egg industry, will be the extent to which both marketing and production are incorporated into producers' plans.

This paper examines the role of marketing and production in meeting challenges facing the egg industry. It describes industry experiences with marketing approaches which may have broader application possibilities within the industry.

Consumption Trends

Per capita egg consumption has declined steadily since the end of World War II. Population growth and increasing per capita consumption of eggs in the form of egg products have kept total production and sales from declining even more sharply. Total table egg production (total production less hatching egg production) declined 8.6% from 1960 to 1988, from 4.8 to 4.4 billion dozen per year. During the same period, total annual per capita egg consumption decreased from 320 to 243 eggs, while annual per capita consumption of eggs in the form of egg products rose from 29 to 46 eggs. Egg product consumption changed little during the 1960's, and climbed only slowly through the 1970's. Since 1980, however, it has jumped 33 percent, reflecting expansions in use in manufacturing a number of food products (such as pasta and cakes) and in hotel, restaurant, and institutional (HRI) uses (11).

Prices, Costs, and Returns

Even though egg prices were stronger in 1988 than in 1987, higher feed costs in the second half of the year resulted in negative net returns to egg producers. Since June 1988, the average wholesale egg price (New York, Grade A) for each month exceeded its corresponding monthly average in 1987, and was up about 2 percent for all of 1988. Average retail egg prices increased around 3 percent for 1988. Feed prices rose 27 percent during the latter half of 1988, compared with the first half of the year. Starting with February 1988, the table egg laying flock on the first of each month had declined relative to 1987, and was down nearly 4 percent for the year.

Since June the slaughter of spent hens has fallen about 17 percent from the year-earlier total for the same period, and the number of hens put into the laying flock has dropped 13 percent. Nevertheless, egg prices did not respond as would be expected from the reductions in flock size. Egg prices were low in the summer, increased to a peak in September, but then declined until mid-December. These weak prices, combined with higher feed costs in the latter half of the year, resulted in significant negative net returns to the industry in 1988. However, egg prices have gone up sharply in 1989, reflecting the the impact of flock size reduction on available supplies of eggs. Wholesale prices peaked near \$1.00 a dozen during the Easter season, and have consistently been well above prices for the comparable periods of 1988.

While it appears that egg production will be profitable in 1989, the industry continues to face major adjustments in the face of declining demand and generally low prices. How these challenges are met will be influenced in part by the attention given to marketing issues.

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An Opportunity for a New Paradigm

Agricultural producers facing declining demand and revenues traditionally resort to reducing supplies and cutting production costs, actions over which they have some control. The egg industry has continually implemented production efficiencies which have tended to reduce production costs. However, during some periods production costs do rise due to such things as feed price increases. Conversely, declines in feed prices can result in lower production costs. Another adjustment action is to reduce the productive capacity of the industry (flock size), as occurred in 1988 and early 1989. Such focus on efficiency and cost effectiveness is a necessary condition for producers to remain in business in a very competitive industry. However, when demand remains stagnant or declines, or feed costs rise sharply, efficiency is only part of the solution.

Individual producers may also try to boost consumer demand and expand their share of market. This can be done by combining production efficiencies with a viable marketing strategy. This may require the development of a new paradigm, that is, a new framework or way for producers to think about the relationship of production and marketing. Such a paradigm would look beyond traditional production and marketing practices to the development of new forms of customer service and the development of branded, value added products targeted at specific markets.

Much of the egg industry's output is sold in basic commodity form. However, there are examples of producers breaking away from the traditional commodity orientation, focusing instead on tailoring products to changing consumer tastes and preferences. These examples include the development of products and plans to move a product from production to market to capitalize on new opportunities. Examples can be found in the expanding broiler and turkey sectors, where producers spend time and money gaining an understanding of the types of products customers demand, and then following up with new product development and marketing. The egg industry may benefit from more efforts to attain a more comprehensive understanding of the forces shaping consumer demand for eggs, and then planning effective production and marketing strategies. Emphasis on marketing rather than production increases producer influence at both the retail and HRI level, where consumers exercise demand.

Marketing—a View Point

The term "marketing" has several meanings. Peter Drucker, the management consultant, has defined it as inclusive and "so basic that it cannot be considered a separate function. It is the whole business seen from the point of view of the final result, that is from the customer's point of view." It is a way of looking at things not from the way one might like them to be, but from the customer's perspective.

Such an inclusive view of marketing has applications for the egg industry. Meeting the customers' ever-changing tastes and preferences, rather than just producing a commodity, can expand sales and profits. Although producers must focus on achieving and maintaining production efficiency, this focus failed to halt the decline in per capita egg consumption over the past 25 years. The only growth area in the egg industry is in egg products, where attention is given to preparing and marketing tailored customer products rather than a commodity.

The egg industry has examples of the development and application of some specific marketing strategies to better serve customers. These experiences in market research, new product development, innovation, advertising, and customer services offer positive approaches for orienting the egg business towards the customer's point of view.

Market Research

Customer Preferences

Developing strategies for the future requires a good understanding of the customer's characteristics, tastes, and preferences. Market research can help identify the type of product and convenience consumers want and would be willing to buy. A completed survey of retail egg customers (4) found:

- The success of egg marketing depends heavily on a retailer's ability to listen to consumer comments, observe consumption trends, and then respond in an effective manner.
- Egg size is very important to customers. Other factors impacting purchases included the price differences between egg sizes and the general price of eggs. The color of the carton and brand name were of lesser importance.
- Most customers preferred to buy eggs by the dozen rather than by weight. While they identified the one dozen carton as the most convenient size, producers who offer a split pack, a six-egg carton, and multiple dozen packs have a potential merchandising advantage.
- Eggs need to be merchandised attractively and neatly. Messy displays discourage egg purchases from the host store and hurt customer attitudes toward egg purchases in general.

Consumer Perceptions

A successful marketing program will be alert to consumer perceptions as well as facts. Concerns over issues such as Salmonella and cholesterol can decrease consumer demand for eggs. Facts and perceptions about health problems associated with cholesterol and Salmonella influence consumer demand for eggs. The industry has responded positively to these concerns by launching educational programs and taking steps to minimize disease outbreaks.

Demographics

Demographic characteristics of customers must be considered when estimating future egg marketing prospects, especially when planning for markets in the next 10 to 20 years. Key demographic trends include overall population growth, the aging American population and the consequent rise in proportion of senior citizens, the increased number of women working outside the home, and the growing importance of ethnic markets.

The increasing number (and proportion) of working women is substantially boosting the demand for quality, convenience based goods. Data from market studies indicate that a woman employed outside the home spends as much as 40 percent more on groceries weekly than a fulltime homemaker. She is less likely to read advertisements, cut coupons, or shop for specials, and is more oriented toward new products, particularly convenience items. A working woman also tends to shop in convenience stores more often (3).

The unique tastes and preferences of ethnic groups, and of language nuances, need to be considered in developing egg marketing plans targeted to such markets. The Hispanic market (an important ethnic market) is booming in Florida, New York, and southern California. Market surveys have found Hispanics to have strong preferences for rice, black beans, pastries, fresh produce, eggs, and milk. They are extremely brand-loyal and quality conscious (3). Linguistic nuances must be considered in creating labeling and advertising plans aimed at ethnic markets.

New Product Development

The egg industry provides three levels of processing, depending on buyer need. Shell eggs constitute the least processed level and, with a few notable exceptions, represent the basic commodity portion of the industry. Egg breakers are the second or intermediate processing segment, producing standard egg products (including liquid, frozen, and dried eggs; egg yolks; albumen; and whole egg blends). The further processed or value added segment includes all eggs processed into foods marketed as prepared (convenience) products (11).

Most of the egg industry agrees that it needs to market egg products and value added convenience items as well as shell eggs. Value added products are increasingly seen as a way to both sell more eggs and expand revenues. However, it can be difficult to shift orientation from producing and selling eggs as a commodity to producing and marketing value added products. A recent survey indicates executives from the largest egg producing companies believe new egg products will boost domestic egg consumption. At the same time, only a few indicated their companies were researching such products. While they recognize the potential of value added products, they prefer that others do the product and market development and promotion, thus precluding personal investment in the success or failure of the product (13).

However, most of the rewards for innovation will go to producers who take the risks. Those who merely applaud the creators and promoters of new products will reap limited rewards. Producers who have expectations that value added products will help them need to examine the experiences of the broiler and turkey industry. The greatest profits are generally not in the commodity products (whole birds), but in the value added, brand labeled products. While commodity bird producers do benefit from the overall increase in demand for broilers, the greatest rewards go to those who develop and market the new products. This same principle applies in the egg industry.

One approach for new product development is for egg products companies to join forces with the expanding food industry to aggressively develop new egg products and markets. This would give egg processors access to food manufacturers with marketing expertise and the resources to commit to a product and a name, relieving them of some of the difficulties and expense of launching new products themselves (13).

Convenience type foods include products consumed both in the home and in the fast food setting. Some suggest egg products are pushed at the expense of the shell egg, sometimes billed as the original convenience food because of its single serving size, ease of preparation, and high quality. Many individuals agree and will continue to buy fresh shell eggs. However, many other customers' main criterion is convenience, which often is defined as something which can be poured out of a box or cooked in a microwave oven.

Innovation

Working closely with customers and watching developments outside the industry for clues about ways to increase egg usage, or use eggs in an entirely new product category, can encourage innovation. An example is the lysozymes from egg whites for use in pharmaceutical applications. The remaining egg white can be sold for cake mixes.

Lessons about applying aseptic packaging to the egg industry may be learned from the dairy industry. The dairy industry's aseptic packaging resulted in an improved product. In time there may be a need for a shelf-stable egg product which can be stored on the supermarket shelf without refrigeration.

Advertising

Advertising is used to create unique brand identity and consumer loyalty for a particular product. While there has been promotion of eggs through generic advertising campaigns such as the national "Incredible Edible Egg" and the "California Fresh Egg," the effectiveness of such advertising remains unclear. The egg industry has spent considerable money promoting the goodness of its product through generic advertising campaigns and advertisements for specific labeled and branded products. However, the amount of money spent on advertising by the egg industry is minimal compared with that spent by the breakfast meal industry. For example, a major firm's advertising budget for breakfast cereals has been estimated at \$525 million per year.

Since advertising is very expensive, the egg industry needs information to decide how best to spend its limited advertising funds. A recent Canadian advertising campaign labeled "Liberate your Eggs" was launched to encourage consumers to eat more eggs for lunch, dinner, and snacks. Prior advertising efforts had not overcome barriers to increased egg consumption because they had failed to change basic consumer attitudes that eggs were primarily just for breakfast. Almost 13 weeks of intensive advertisements were required to encourage consumers to eat eggs throughout the day. However, after 26 weeks of advertising, consumption climbed by 1.4 percent (2).

Some firms have experimented with the concept that high quality branded eggs can sell themselves with no advertising. A major egg company experimented with a labeled egg campaign in some eastern U.S. metropolitan markets, and found that a high quality product can indeed sell itself. Stores displayed company branded eggs right next to the store branded eggs, with no decrease in sales of store brands. In some instances, total egg sales increased. In later advertising, the entire egg story was told—the quality of the egg, where it comes from, how it is packed. The firm worked on creating a unique egg product, rather than a commodity product (8).

Customer Service

Given the fairly homogeneous nature of shell eggs, the industry can differentiate its product by customer service, focusing on timeliness of delivery, product quality, and creation of intangible benefits in customers' minds. Providing the services and creating the image requires hard work, persistence, and money. But unless the industry does so, it can

quickly lose markets. Focusing on service and product quality, in addition to price, can give a producer a competitive edge.

Products may have to be tailored to a particular market. For example, one egg company has many institutional customers requiring extra large and jumbo sized eggs. Summer heat reduces large egg production, so a special feeding program combined with a molting program was required to produce more of the larger eggs. This program costs more, but was a necessary step to retain customers. Packing eggs in 15-dozen cases has also been used as a selling point, for it is easier for customers to move 15-dozen cases in and out of coolers. Such packaging costs a little more, but represents a convenience to the customer. Another customer service was to offer brown eggs, on basically a break-even basis (10).

Branded Labeled Eggs

Using branded labeled products is one way to differentiate products for egg purchasers and increase profits for producers. Such labels are a form of advertising and create an impression among consumers of product uniqueness (usually consistent quality) and lead to repeat purchases and consumer loyalty. One of the larger U.S. egg producers recently launched a massive private label campaign in eastern U.S. markets to buffer itself from the volatility of egg market quotations and have some influence over the price of its product at the supermarket. The company worked on creating an image of its egg as a superior quality product, not just a commodity (7). While numerous unsuccessful attempts at creating branded eggs for consumer loyalty have been made, this plan had three unique characteristics: targeted area, product quality, and promotion. A large investment and patience were necessary, and the company anticipated that 2 1/2 to 3 years would pass before the program would show a profit. Based upon extensive consumer studies and large amounts of statistical data, it was determined that consumers prefer a fresher egg and are generally willing to pay a premium for it. A production complex was built near the market to speed fresh eggs on the supermarket shelf within 48 hours of lay. The eggs are packaged in a distinctively different clear plastic carton with the sell-by date stamped on it.

This firm also uses a strategy in which it neither discounts nor negotiates on prices, but bases prices on a formula. The philosophy is that in a branded egg program, a producer doesn't have to reduce the price of the product to get it in the supermarket. The producer has one standard price structure for all the branded eggs it sells to stores.

The producer was concerned about its lack of control over the premium prices set by retailers for the labeled eggs. As stated above, it prices to the supermarkets off a formula, which in turn set prices at whatever level they wish. The initial plan was to sell branded eggs for around 10 cents more

per dozen than store brands. Supermarkets elected to price the branded eggs with a premium of 10-25 cents per dozen. The producer was concerned when premiums were set too high, for at some price levels premium products will not sell (7,8).

Conclusions

The egg industry continues to face numerous challenges as it adjusts production to changing consumer tastes and financial

pressures. One important factor influencing the success of this adjustment will be how the industry addresses both production and marketing issues. More attention to all facets of marketing may offer greater profit opportunities by transforming eggs, as much as possible, from a commodity product to a branded, labeled premium product. Industry experiences show that attention to customer service, market research, product development, innovation, and advertising have contributed to successful development and marketing efforts by some egg producers.

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Livestock Costs and Returns, 1988-89

Hosein Shapouri and Terry Crawford

Abstract: The U.S. livestock producers were severely affected by the drought of 1988. Feed expenditures jumped 28 percent; conversely, total cash receipts for livestock increased only 3 percent. Estimates and projections of production costs for the livestock sector indicate that returns to livestock producers decreased last year, and will probably deteriorate still further in 1989, due to higher feed and forage costs.

Keywords: Livestock sector, feed, drought, cost-of-production.

This article presents estimates and projections of production costs for cattle, hogs, and sheep for calendar years 1988 and 1989. These estimates are developed from the 1987 ERS cost of production budgets. The cost of production data are collected through field surveys for technical coefficients which the ERS and the National Agricultural Statistics Service (NASS) conducted in 1980, and are updated by supplying current prices and production changes to develop summary aggregate budgets.

Cost of Production

The 1988 cost estimates for cattle, hogs, and sheep are based on 1987 budgets. The livestock budgets provide useful estimates of costs and returns to farmers, industry representatives, financial analysts, and policy makers. The tables that accompany this article present detailed information about budgets, production values, cash variable and fixed expenses, and capital replacement costs, so they include two measures of cash returns: value of production, less total cash variable and fixed expenses; and value of production, less cash variable and fixed expenses, plus capital replacement. Total fixed and variable cash expenses represent the out-of-pocket costs incurred during production.

Cash returns, before and after a charge for the replacement capital, are key indicators of producer supply response. A positive cash return is an incentive for producers to continue or even expand their operation; a negative cash return is often regarded as a signal to discontinue production. However, these are average budgets—there are producers faring better and worse than the average. Some individuals may be expanding at a time when most would not. Also, producers can make substitutions among inputs in different proportions than shown in these budgets, possibly further lowering their costs.

The residual cash returns reflect the cash flow available for family living expenses, repaying debts, and replacing machinery, equipment, and buildings. In the short term, producers may defer machinery and equipment purchases or repairs if the farm is producing little income or is in an unfavorable tax position. But over the long run, operators must replace and maintain the buildings and equipment typically used in the operation.

Approach

Input costs, market prices of livestock, and the index of prices paid by farmers for production inputs for 1988 are used to estimate the livestock budgets. For the 1989 calendar year, the projected price of livestock and the farm prices of corn and soybean meal are used to estimate gross value of livestock production, feed, and concentrate expenditures. Percent changes in the GNP deflator are used to project other input costs. The GNP deflator is also used as a proxy for expected inflation in other production costs for 1989.

Cow-Calf

The gross value of cow-calf production increased from \$314 per cow in 1987 to \$348 in 1988, primarily because of higher cattle prices. Higher costs for feed and all other inputs reduced the returns of cow-calf operators. The gross value of production failed to cover total cash expenses plus capital replacement. As a result, receipts less cash expenses to cow-calf production dropped to -\$27 per cow in 1988.

Net returns to cow-calf production will likely deteriorate further in 1989 due primarily to higher wintering expenses. Higher feed costs and a small increase in fed beef price should lower the price cattle feeders can pay for feeder cattle, which will depress the returns to cow-calf production. Receipts less cash expenses will probably plunge to \$40 per cow in 1989. Still, this will be the fourth consecutive year of positive returns above cash expenses.

Fed Cattle

Increases in U.S. fed cattle production costs more than offset gains in cattle prices, worsening the returns to fed beef producers. These budgets depict the situation where the same producer owns the cattle and the feedlot. The gross value of production climbed from \$65 per cwt in 1987 to \$70 per cwt in 1988, and will probably rise to \$73 in 1989. Net cash returns (the value of production less total cash expenses) fell from \$5 per cwt in 1987 to -\$1 in 1988, and are expected to improve in 1989.

Returns to farmer feedlots continued to deteriorate. In 1988, the value of production failed to cover total cash expenses. Net cash returns declined to -\$1 per cwt in 1988, and will probably remain negative in 1989. Unlike commercial feedlots, farmer feedlots require a lower turnover per unit of capacity and thus a larger capital investment per animal, resulting in higher capital replacement costs. Value of production, less cash expenses, plus capital replacement were -\$6 per cwt in 1988 and are expected to remain negative in 1989.

Higher feed and feeder cattle costs also reduced 1988 returns to commercial feedlots. Total variable cash expenses jumped 17 percent in 1988; fixed cash expenses, chiefly interest paid, remained unchanged from 1987, about \$5. Here again, the value of production failed to meet total cash expenses. Residual returns to management and risk declined from \$5 to -\$1 per cwt. Higher cattle prices, coupled with less expensive feed, could improve cash returns both before and after a charge for capital replacement in 1989.

Hogs

Farrow-to-finish operations account for about 80 percent of slaughter hogs produced. Last year, hog producers faced lower hog prices and higher feed costs than in 1987. Slaughter hog prices fell \$8 per cwt, and feed costs increased \$8 per cwt. The value of production did not exceed cash expenses plus replacement costs. Producers began liquidating their herds, which lowered interest costs; nevertheless, continuing increases in building and equipment costs raised capital replacement costs. Returns less cash expenses for farrow-to-finish hog producers declined from \$17 per cwt in 1987 to \$1 in 1988.

Net returns to hog producers are expected to slip again in 1989. Higher prices for corn and protein supplements, combined with small declines in hog prices, should push the total cash expenses up by \$3, and decrease the net returns to -\$11 per cwt in 1989.

Higher feed costs and lower hog prices reduced the demand for feeder pigs in 1988, further depressing prices. These lower prices narrowed the gap between the value of produc-

tion and total cash expenses from \$33 per cwt in 1987 to \$4 in 1988. However, the positive return was less than in 1987, and did not cover the capital replacement costs.

Net returns to feeder pig producers will also probably deteriorate in 1989, due to higher feed costs and relatively sluggish feeder pig prices. The value of production, less cash expenses, plus capital replacement will likely fall to \$17 per cwt.

Feeder pig finishers experienced a large reduction in returns above total cash expenses, from \$5 per cwt in 1987 to -\$3 per cwt in 1988. Although total cash expenses declined by about \$1 per cwt (mainly due to lower feeder pig prices), the value of production fell by \$8 per cwt. Grain and protein concentrate feed expenses increased by 40 percent, while costs for feeder pigs fell 21 percent. Net returns to feeder pig finishers was -\$7 per cwt, down from \$1 in 1987.

Net returns to feeder pig finishers in 1989 should follow the industry trend. Higher feed costs, plus small increases in other variable and fixed expenses, are expected to increase the total cash expenses by about \$2 per cwt. Net returns before and after a charge for capital replacement will likely remain negative, but should exceed the 1988 level.

Sheep

Sheep production has consistently been one of the most profitable livestock enterprises in the past 18 years. Nevertheless, U.S. sheep producers experienced a sharp decline in their cash returns in 1988 as sheep production increased. Higher feed costs, as well as lower lamb prices, eroded their financial positions. The value of production, less cash expenses and replacement, declined from \$21 to \$11 per ewe. The value of production, less total cash expenses, dropped from \$28 to \$19 per ewe.

Net returns to sheep producers will remain positive, but will likely continue to fall in 1989. Higher feed costs, combined with small boosts in other input costs, will raise total cash expenses. Lamb prices are expected to drop, thus reducing the net returns.

Table B-1 --U.S. cow-calf production costs, all sizes of operations, 1987-1989

Item	1987	1988e	1989p
\$ / cow			
Gross value of production:			
Steer calves (1.116 cwt)	94.03	105.70	105.06
Heifer calves (.7813 cwt)	60.01	68.59	68.17
Feeder steers (.9982 cwt)	77.63	86.28	85.76
Feeder heifers (.7150 cwt)	47.72	52.70	52.38
Cull cows (.7974 cwt)	34.31	34.91	34.70
Total	313.70	348.18	346.06
Cash expenses:			
Feed--			
Grain (2.2277 cwt)	5.94	8.68	9.71
Silage (.286 ton)	6.07	6.28	6.55
Protein supplements (1.462 cwt)	17.65	23.57	25.07
Salt and minerals (.332 cwt)	2.69	2.78	2.90
Hay (1.112 ton)	35.17	44.93	46.91
Pasture	39.78	50.82	53.06
Public grazing	0.71	0.73	0.77
Crop residue (purchased)	0.06	0.06	0.06
Other--			
Veterinary and medicine	6.69	6.86	7.16
Livestock hauling	1.98	2.04	2.13
Marketing	4.42	4.57	4.77
Custom feed mixing	0.28	0.29	0.30
Fuel, lube, and electricity	14.06	14.50	15.14
Machinery and building repairs	21.96	22.62	23.61
Hired labor (3.274 hr)	15.01	15.46	16.14
Total, variable cash expenses	172.47	204.19	214.29
General farm overhead	30.00	33.31	33.09
Taxes and insurance	9.77	10.85	10.78
Interest	43.60	48.42	48.10
Total, fixed cash expenses	83.37	92.58	92.02
Total cash expenses	255.84	296.77	306.26
Value of production less cash expenses	57.86	50.46	39.80
Capital replacement	75.58	78.15	81.59
Value of production less cash expenses and capital replacement	-17.72	-26.69	-41.79

e= Estimate
p= Projection

Table B-2--U.S. fed cattle production costs, all sizes of operations, 1987-89

Item	1987	1988e	1989p
\$ / cwt 1/			
Gross value of production:			
Fed beef (100 lbs)	65.36	69.54	72.96
Total	65.36	69.54	72.96
Cash expenses:			
Feeders--			
Feeder cattle (59.80 lbs)	36.81	40.87	40.81
Feed--			
Haylage (22.7 lbs)	0.14	0.14	0.15
Silage (175.6 lbs)	1.54	1.59	1.66
Dry grain (217.5 lbs)	6.46	9.44	10.56
Concentrates (40.1 lbs)	1.92	2.85	2.98
protein supplements (22.4 lbs)	2.62	3.50	3.72
Legume hay (35.0 lbs)	0.44	0.56	0.59
Other roughages (19.4 lbs)	1.02	1.30	1.36
Pasture	0.01	0.01	0.01
Crop residue	0.00	0.00	0.00
Other--			
Veterinary and medicine	0.53	0.54	0.57
Livestock hauling	0.36	0.37	0.39
Marketing	0.19	0.20	0.21
Bedding	0.14	0.14	0.15
Fuel, lube, and electricity	0.66	0.68	0.71
Machinery and building repairs	1.02	1.05	1.10
Hired labor	0.67	0.69	0.72
Miscellaneous	0.72	0.77	0.80
Manure credit	-0.08	-0.08	-0.08
Total, variable cash expenses	55.17	64.64	66.40
General farm overhead	0.45	0.48	0.50
Taxes and insurance	0.29	0.31	0.32
Hired management	0.06	0.06	0.07
Interest	4.70	5.00	5.25
Total, fixed cash expenses	5.50	5.85	6.14
Total cash expenses	60.67	70.49	72.54
Value of production less cash expenses	4.69	-0.95	0.42
Capital replacement	2.76	2.85	2.98
Value of production less cash expenses and capital replacement	1.93	-3.81	-2.56

e= Estimate.
p= Projection.
2/ Quantities in parentheses are for 1987.

Table B-3 -- Fed cattle production costs, farmer feedlots, all sizes of operations, 1987-89

Item	1987	1988e	1989p
	\$ /cwt 1/		
Gross value of production:			
Fed beef (100 lbs)	65.13	69.54	72.96
Total	65.13	69.54	72.96
Cash expenses:			
Feeders--			
Feeder cattle (55.0 lbs)	33.95	37.70	37.64
Feed--			
Haylage (44.0 lbs)	0.27	0.28	0.29
Silage (326.0 lbs)	2.82	2.92	3.04
Dry grain (196.3 lbs)	5.89	8.61	9.63
Concentrates (70.28 lbs)	3.23	4.80	5.01
Protein supplements (24.7 lbs)	3.05	4.07	4.33
Legume hay (68 lbs)	0.86	1.10	1.15
Pasture	0.01	0.01	0.01
Crop residue	0.00	0.00	0.00
Other--			
Veterinary and medicine	0.59	0.61	0.63
Livestock hauling	0.69	0.71	0.74
Marketing	0.36	0.37	0.39
Bedding	0.27	0.28	0.29
Fuel, lube, and electricity	0.85	0.88	0.91
Machinery and building repairs	1.71	1.76	1.84
Hired labor	0.51	0.53	0.55
Manure credit	-0.08	-0.08	-0.08
Total, variable cash expenses	54.98	64.53	66.38
General farm overhead	0.88	0.94	0.99
Taxes and insurance	0.50	0.53	0.56
Interest	4.68	5.00	5.24
Total, fixed cash expenses	6.06	6.47	6.79
Total cash expenses	61.04	71.00	73.16
Value of production less cash expenses	4.09	-1.46	-0.20
Capital replacement	4.76	4.92	5.14
Value of production less cash expenses and capital replacement	-0.67	-6.38	-5.34

e= Estimate
p= Projection
1/ of liveweight sold.

Table B-4 --Fed cattle production costs, commercial feedlots, all sizes of operations, 1987-89

Item	1987	1988e	1989p
	\$ /cwt 1/		
Gross value of production:			
Fed beef (100 lbs)	65.61	69.54	72.96
Total	65.61	69.54	72.96
Cash expenses:			
Feeders--			
Feeder cattle (64.9 lbs)	39.85	44.25	44.18
Feed--			
Silage (16 lbs)	0.19	0.20	0.20
Dry grain (240.0 lbs)	7.06	10.32	11.54
Concentrates (8 lbs)	0.53	0.79	0.82
Protein supplements (20 lbs)	2.17	2.90	3.08
Other roughages (40 lbs)	2.10	2.68	2.80
Other--			
Veterinary and medicine	0.47	0.48	0.50
Fuel, lube, and electricity	0.46	0.47	0.50
Machinery and building repairs	0.29	0.30	0.31
Hired labor	0.85	0.88	0.91
Miscellaneous	1.49	1.59	1.66
Manure credit	-0.07	-0.07	-0.07
Total, variable cash expenses	55.39	64.78	66.44
Taxes and insurance	0.07	0.07	0.08
Hired management	0.13	0.14	0.14
Interest	4.72	5.00	5.25
Total, fixed cash expenses	4.92	5.21	5.47
Total cash expenses	60.31	70.00	71.91
Value of production less cash expenses	5.30	-0.46	1.05
Capital replacement	0.64	0.66	0.69
Value of production less cash expenses and capital replacement	4.66	-1.12	0.36

e= Estimate
p= Projection
1/ of liveweight sold.

Table B-5 --U.S. farrow-to-finish production costs, all sizes of operations, 1987-89

Item	1987	1988e	1989p
	\$ /cwt 1/		
Gross value of production:			
Slaughter hogs (94.41 lbs)	48.9	41.05	39.45
Cull sows (5.59 lbs)	2.4	1.82	1.78
Total	51.30	42.87	41.23
Cash expenses:			
Feed--			
Grain (348.5 lbs)	10.08	14.73	16.48
Protein supplements (81.1 lbs)	11.14	14.87	15.82
Pasture	0.03	0.03	0.03
Other--			
Veterinary and medicine	0.56	0.57	0.60
Livestock hauling	0.13	0.13	0.14
Marketing	0.36	0.37	0.39
Bedding	0.14	0.14	0.15
Fuel, lube, and electricity	1.75	1.80	1.88
Machinery and building repairs	2.35	2.42	2.53
Hired labor (.203 hr)	1.46	1.50	1.57
Manure credit	-0.17	-0.17	-0.17
Total, variable cash expenses	27.83	36.42	39.42
General farm overhead	1.89	1.58	1.52
Taxes and insurance	0.26	0.22	0.21
Interest	4.09	3.42	3.29
Total, fixed cash expenses	6.24	5.21	5.02
Total cash expenses	34.07	41.64	44.44
Value of production less cash expenses	17.23	1.23	-3.21
Capital replacement	6.89	7.12	7.44
Value of production less cash expenses and capital replacement	10.34	-5.89	-10.64

e= Estimate

p= Projection

1/ of liveweight sold.

Table B-6 --U.S. feeder pig production costs, all sizes of operations, 1987-89

Item	1987	1988e	1989p
	\$ /cwt 1/		
Gross value of production:			
Pigs (80.91 lbs)	84.63	66.58	65.80
Cull sows (19.09 lbs)	8.19	6.20	6.09
Total	92.82	72.78	71.89
Cash expenses:			
Feed--			
Grain (431.1 lbs)	13.41	19.60	21.92
Protein supplements (117.8 lbs)	15.10	20.16	21.45
Pasture	0.12	0.12	0.13
Other--			
Veterinary and medicine	1.52	1.56	1.63
Livestock hauling	0.20	0.21	0.21
Marketing	1.65	1.71	1.78
Bedding	0.36	0.37	0.39
Custom feed mixing	1.19	1.23	1.28
Fuel, lube, and electricity	6.61	6.82	7.12
Machinery and building repairs	4.73	4.87	5.09
Hired labor (.448 hr)	3.38	3.48	3.63
Manure credit	-0.13	-0.13	-0.13
Total, variable cash expenses	48.14	60.00	64.50
General farm overhead	3.19	2.50	2.47
Taxes and insurance	0.56	0.44	0.43
Interest	7.66	6.01	5.93
Total, fixed cash expenses	11.41	8.95	8.84
Total cash expenses	59.55	68.94	73.34
Value of production less cash expenses	33.27	3.83	-1.45
Capital replacement	13.94	14.41	15.05
Value of production less cash expenses and capital replacement	19.33	-10.58	-16.50

e= Estimate

p= Projection

1/ of liveweight sold.

Table B-7 --U.S. feeder pig finishing production costs,
all sizes of operations, 1987-89

Item	1987	1988e	1989p
	\$/cwt 1/		
Gross value of production:			
Slaughter hogs (100 lbs)	51.51	43.24	41.55
Total	51.51	43.24	41.55
Cash expenses:			
Feeders--			
Feeder pigs (22.5 lbs)	22.87	17.99	17.78
Feed--			
Grain (239.2 lbs)	6.90	10.08	11.28
Protein supplements (45.4 lbs)	6.04	8.06	8.58
Pasture	0.01	0.01	0.01
Other--			
Veterinary and medicine	0.48	0.49	0.51
Livestock hauling	0.16	0.16	0.17
Marketing	0.43	0.44	0.46
Custom feed mixing	0.09	0.09	0.10
Bedding (8 lbs)	0.06	0.06	0.06
Fuel, lube, and electricity	1.11	1.14	1.19
Machinery and building repairs	1.59	1.64	1.71
Hired labor (.73 hr)	0.45	0.46	0.48
Manure credit	-0.13	-0.13	-0.13
Total, variable cash expenses	40.06	40.52	42.21
General farm overhead	1.80	1.51	1.45
Taxes and insurance	0.24	0.20	0.19
Interest	4.31	3.62	3.48
Total, fixed cash expenses	6.35	5.33	5.12
Total cash expenses	46.41	45.85	47.34
Value of production less cash expenses	5.10	-2.61	-5.78
Capital replacement	4.11	4.25	4.44
Value of production less cash expenses and capital replacement	0.99	-6.86	-10.22

e= Estimate
p= Projection
1/ of liveweight sold.

Table B-8 --U.S. sheep production costs, all sizes of operations, 1987-89

Item	1987	1988e	1989p
	\$/ewe		
Gross value of production:			
Slaughter lambs (32.6 lbs)	22.96	20.07	19.26
Feeder lambs (28.9 lbs)	24.02	21.38	20.81
Cull ewes (29.5 lbs)	6.18	5.40	5.26
Wool (10.0 lbs)	7.62	11.39	11.89
Wool incentive payment	10.48	6.41	5.81
Unshorn lamb payment	1.79	0.91	0.95
Total	73.05	65.56	63.98
Cash expenses:			
Feed--			
Grain (.733 bu)	1.19	1.74	1.95
Protein supplements (.02 ton)	4.00	5.34	5.68
Salt and minerals (7 lbs)	0.4	0.41	0.43
Hay (.101 ton)	2.82	3.60	3.76
Pasture	3.41	3.53	3.68
Private range	0.00	0.00	0.00
Public grazing	0.67	0.69	0.72
Crop residue	0.05	0.06	0.07
Other--			
Veterinary and medicine	1.11	1.14	1.19
Livestock hauling	1.26	1.30	1.35
Marketing	0.30	0.31	0.32
Ram death loss	0.27	0.28	0.29
Shearing and tagging	1.34	1.39	1.45
Fuel, lube, and electricity	1.25	1.29	1.35
Machinery and building repairs	2.35	2.42	2.53
Hired labor	6.98	7.19	7.51
Miscellaneous	1.19	1.27	1.33
Total, variable cash expenses	28.59	31.96	33.60
General farm overhead	5.50	4.94	4.82
Taxes and insurance	1.80	1.62	1.58
Interest	8.77	7.87	7.68
Total, fixed cash expenses	16.07	14.42	14.08
Total cash expenses	44.66	46.38	47.67
Value of production less cash expenses	28.39	19.18	16.31
Capital replacement	7.79	8.05	8.41
Value of production less cash expenses and capital replacement	20.60	11.12	7.90

e= Estimate
p= Projection

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